CURTIS'S

BOTANICAL MAGAZINE:

Flower-Garden Displayed:

IN WHICH

The most Ornamental Foreign Plants, cultivated in the Open Ground, the Green-House, and the Stove, accurately reprefented in their natural Colours.

TO WHICH ARE ADDED.

Their Names, Class, Order, Generic and Specific Characters, according to the celebrated LINNEUS; their Places of Growth, and Times of Flowering:

TOGETHER WITH

THE MOST APPROVED METHODS OF CULTURE.

WOR K

Intended for the Use of such LADIES, GENTLEMEN, and GARDENERS, as wish to become scientifically acquainted with the Plants they cultivate.

CONTINUED BY

70HN SIMS, M.D.

FELLOW OF THE LINNEAN SOCIETY.

VOL. XV.

Ye vallies low,
Throw hither all your quaint enamell'd eyes,
That on the green turf fuck the honied thowers
And purple all the ground with vernal flowers.
Bring the rathe primrose that for sken dies,
The tusted crow-toe, and pale jessamine,

The glowing violet,
The musk-rose and the well-attired woodbine,
With cowssips wan that hang the pensive head,
And every flower that sad embroidery wears:
Bid Amarantus all his beauty shed,
And dasfadillies fill their cups with tears, The white pink, and the panfy treakt with jet; Q To strew the grave where CURTIS lies.

LONDON:

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PREFACE.

A Second volume of the BOTANICAL MAGAZINE having been brought to a conclusion fince the death of Mr. Curtis, it seems proper that the very liberal encouragement this Work has continued to receive should be gratefully acknowledged, the demand for it being by no means diminished, notwithstanding the irreparable loss sustained by that melancholy event, and the increased price, which the pressure of the times has made necessary.

To a few readers it may not be totally uninteresting to learn how the Botanical Magazine came under the present direction. Long before his death Mr. Curtis, perceiving his diffolution gradually approaching, naturally became anxious to fecure to his family the pecuniary benefits arifing from the fale of the Work, their fole dependance. In order to lessen the impediments to carrying it on, he laboured, as much as his infirm state of health would permit, to arrange and increase the necessary materials. He applied to feveral of his most eminent botanical friends and obtained their promise of affistance. Finally, in the confidence of friendship, he subjected the future management to the controul of the present Editor, with whom he had many years lived in habits of intimacy. How far this confidence has been justified by the event, with respect to his family, cannot be a general concern, nor is it necessary to fay any thing of the Work itself as far as it has hitherto proceeded: it is before a discerning public and it's merit will be fairly appreciated.

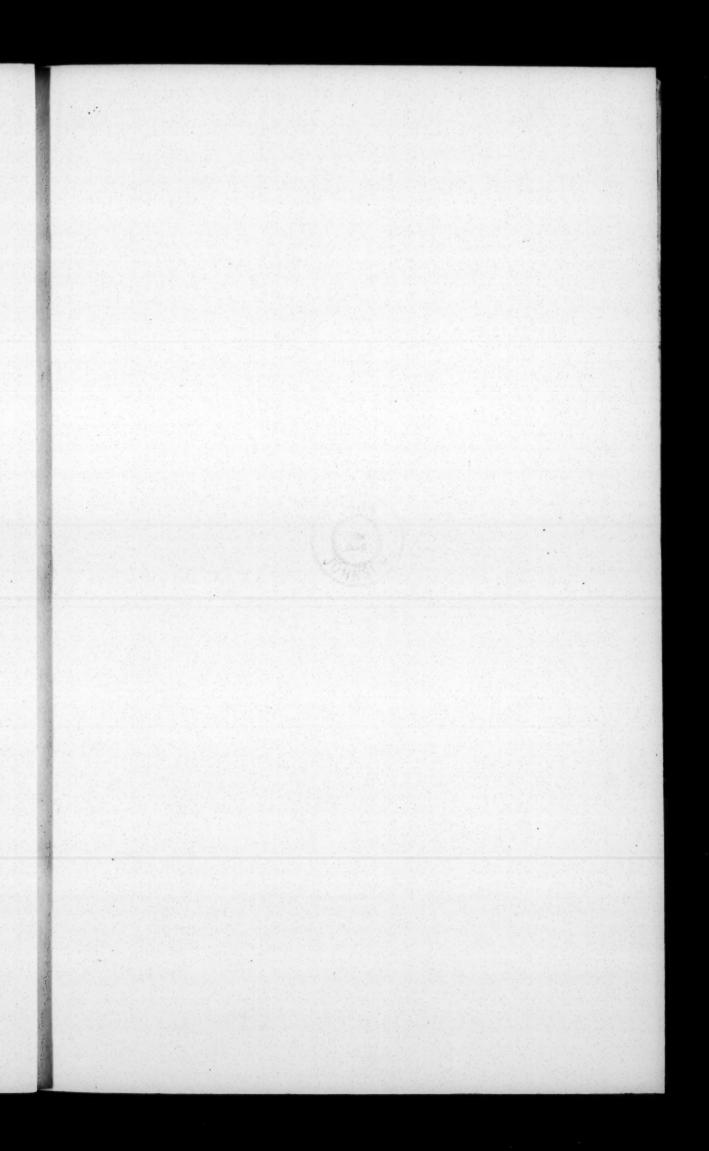
In the construction of these volumes, but little use has latterly been made of the materials left by Mr. Curtis for several reasons, principally from a desire to preserve them as entire as possible for the service of the proprietors, in case of emergency, and a wish to indulge our botanical readers with a representation and description of some of the novel and curious plants which are annually introduced, particularly from the Cape of Good Hope. In one natural order (the Ensatz of Linnæus—Irides of Jussieu) such additions have been made to our former

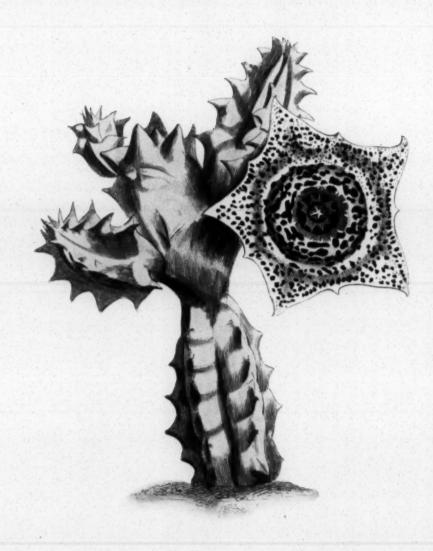
former stock as to render the nomenclature a mass of confusion. No part of Europe contains so copious a collection of these plants as the neighbourhood of London, the botanical world have therefore some right to expect an elucidation of this subject in our Magazine, and the Editor thinks himself particularly fortunate in having met with so able and liberal a coadjutor in this difficult task.

What has been already done will shew how much is due to the industry and ability of John Bellenden Gawler, Esq. with whose assistance we hope in a sew numbers to complete so lucid an arrangement of the principal part of this order, that no Botanist will hereaster find any difficulty in reducing the individuals to their proper genera.

The same Artists are employed in every department of the Work as in Mr. Curtis's time. This will, it is hoped, insure the same excellence of execution, which is such that the sigures in the Botanical Magazine, for elegance as well as correctness, will in general suffer nothing by a comparison with the most expensive botanical works, a fact loudly attested by the circumstance that a large proportion of the ornaments of our most expensive porcelain and cabinet ware is copied from them. The Botanical Magazine will continue to be carried on as much as possible on the same plan as by Mr. Curtis himself. If somewhat more of critical discussion should have been introduced, our botanical friends will easily perceive that the subjects demanded it, and whilst the price is not thereby increased, it is not apprehended that any one will complain.

For himself, the Editor solicits the indulgence of the learned Botanist, an indulgence he feels to be more than ordinarily necessary; for being engaged in a laborious and important profession, and having ever made Botany his amusement, never a serious study, he has greater dependance upon the continued assistance of his more learned friends than upon the exertion of his own abilities. But, with this aid, he slatters himself that the Botanical Magazine will continue in every respect to deserve the public favour as well as it has heretofore done.





STAPELIA LENTIGINOSA. FRECKLED STAPELIA.

Class and Order.

PENTANDRIA DIGYNIA.

Generic Character.

Contorta. Nettar. duplici stellula 5-phylla tegente genitalia.

Specific Character.

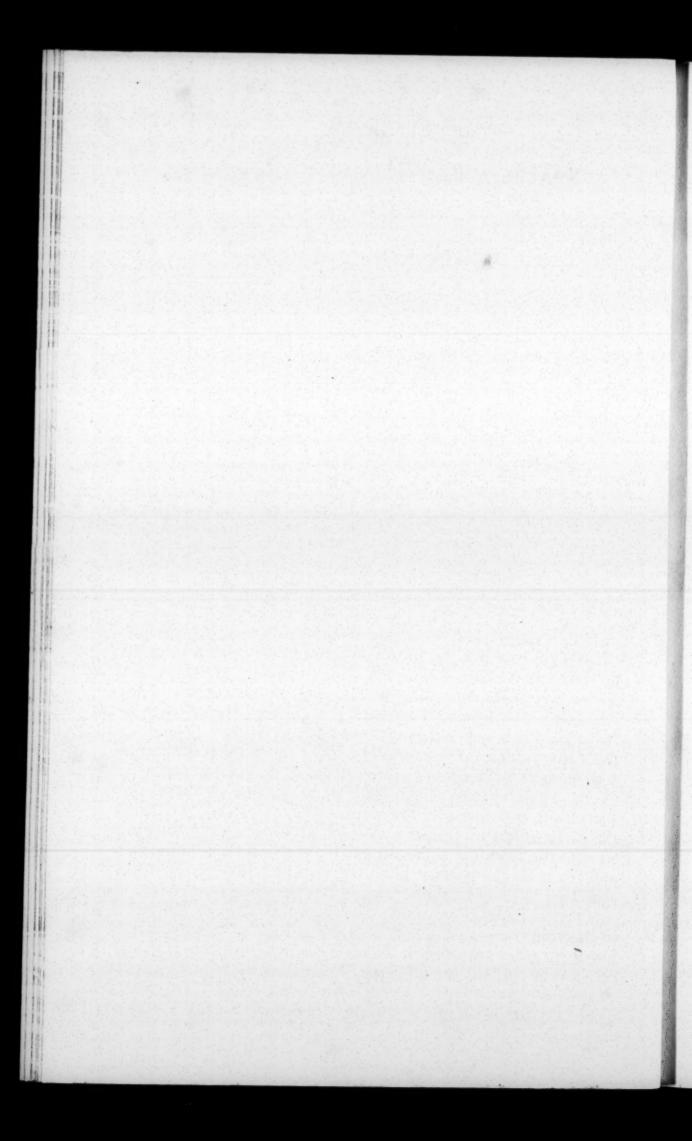
STAPELIA lentiginosa, corollis decem-dentatis, laciniis alternis obsoletis, sundo concavo orbiculo elevato cincto; caulibus superne ramosis, ramis pentagonis patentibus tuberculosis: tuberculis uncinatis.

When the Hortus Kewensis of Mr. Ayton was published, there were only five species of Stapelia known in this country, and of these two had been newly introduced by Mr. Francis Masson. This laborious investigator of nature has since described and sigured forty-one new species, the slowers of many of which are extremely beautiful as well as singular in their appearance. On carefully examining all these species, as well as those before known, we cannot find that our plant in every respect exactly corresponds with any one of them. In the colour and shape of the corolla, it agrees very well with the guttata, but in this the slowers sit on longer peduncles, which arise from the base of the stalk, the stalks are undivided, and the tubercles are not hooked; on which account we deem ourselves justified in considering it as a new species.

The specimen from which our figure was taken, flowered in the collection of E. D. WOODFORD, Esq. at Vauxhall, last summer, who received it from the royal garden at Kew, into which this species also was introduced by Mr. FRANCIS

MASSON.

For the proper mode of culture, see our account of Stapelia variegata.





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DIANELLA CERULEA. BLUE DIANELLA.

Class and Order.

HEXANDRIA MONOCYNIA.

Generic Character.

Cal. nullis. Cor. 6-petala. Stam. receptaculo inferta. Per. Bacca 8-locularis polysperma.

Specific Character.

DIANELLA cærulea; caule adscendente geniculato foliis diffichis lineari-lanceolatis carinatis margine spinuloris, pedunculis rectis divaricatis.

This plant is a native of New Holland, and we believe was first raised in this country from seeds from Port Jackson, about the year 1783, by our much respected friend, the late Mr. CUFF, of Teddington, a gentleman of great zeal and affiduity in cultivating plants and promoting the science of Botany, to whose liberality the Brompton Botanic Garden is indebted for this and many other scarce and beautiful plants.

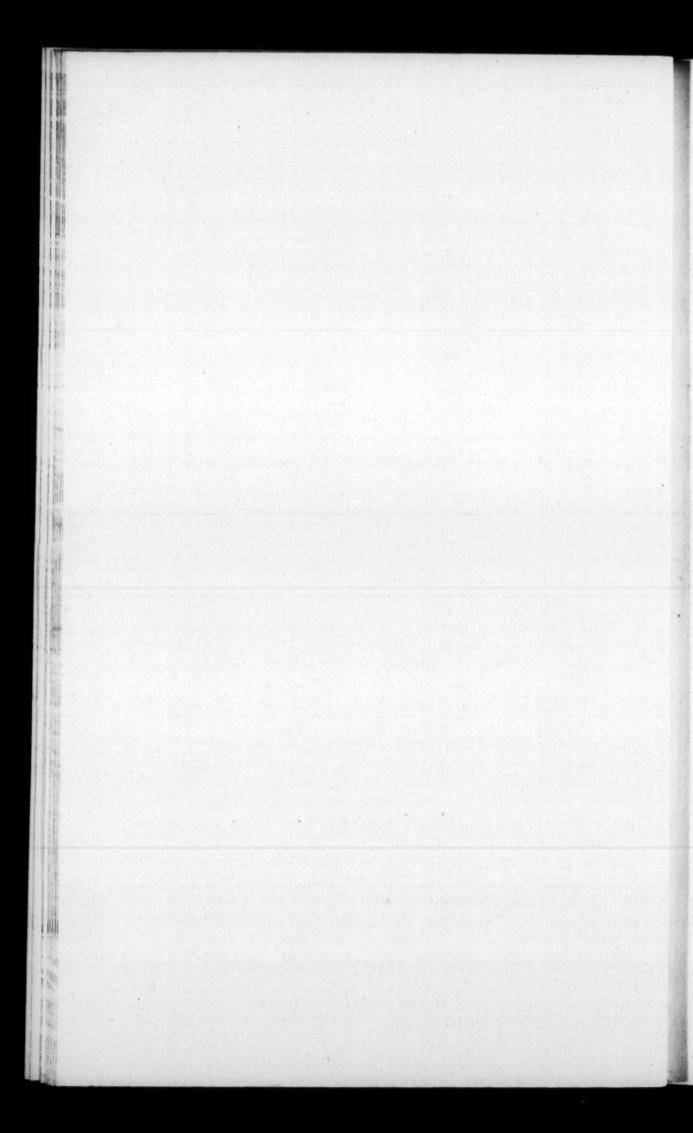
It fucceeds well in the greenhouse, begins flowering about the month of May, and continues in bloffom during the greatest part of the fummer. Is readily increased by parting its roots in the fpring, and should be planted in pots filled with loam

and peat earth.

The Chevalier de la MARCK has given the name of Dianella nemorosa to the Dracæna ensifolia of Linnaus, with which this plant has confiderable affinity, but is certainly a distinct species. The Dianella nemorosa of Jacquin, figured in his Hort. Schoenb. t. 94. appears to be different from both.

We have adopted the name by which it is known in those collections about town which possess it.—We hope to take another opportunity of faying fomething more on this genus

as distinguished from Dracena.







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SEMPERVIVUM GLOBIFERUM. GLOBULAR HOUSELEEK.

Class and Order.

DODECANDRIA DODECAGYNIA.

Generic Character.

Cal. 12-partitus. Petal. 12. Capf. 12. polysperm.

Specific Character and Synonyms.

SEMPERVIVUM globiferum, foliis ciliatis, propaginibus globosis. Spec. Plant. 665. Edit. Willdenow, 952. Jacquin Aust. 5. p. 50. tab. app. 40. SEDUM rosulis ciliatis, petalis, subulato-lanceolatis duodenis. Haller Hist. n. 950. SEDUM majus vulgari simile, globulis decidentibus. Morison, 3. p. 472. s. 12. t. 7. f. 18.

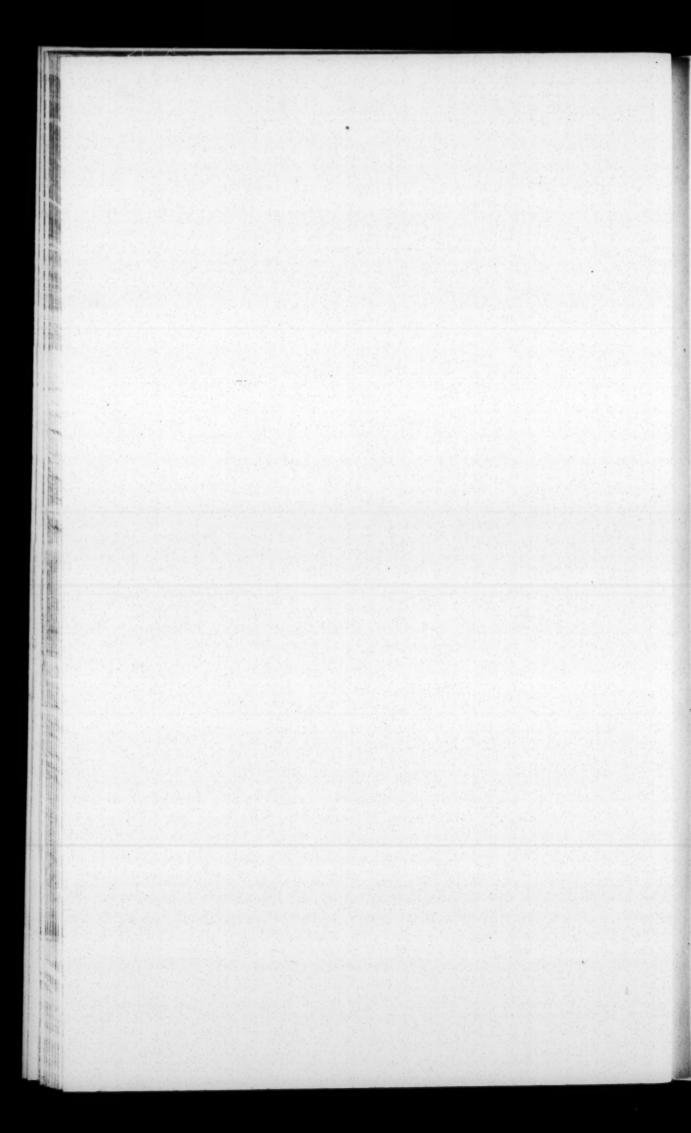
This plant being a native of Russia and Germany, is perfectly hardy, easily bearing our winters in any dry situation.

Like most fucculent plants, it grows best in a dry light foil,

fuch as loam mixed with lime rubbish, &c.

We are told by Mr. AYTON, that it was cultivated by Mr. PHILIP MILLER in 1731, but was probably lost from our gardens till it was again introduced by the late Mr. CURTIS.

It flowered for the first time in the Brompton Botanic







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CHRYSANTHEMUM TRICOLOR. THREECOLOURED CHRYSANTHEMUM.

Class and Order.

SYNGENESIA POLYGAMIA SUPERFLUA.

Generic Character.

Recept. nudum. Pappus marginatus. Cal. hemisphæricus imbricatus, squamis marginalibus membranaceis.

Specific Character and Synonym.

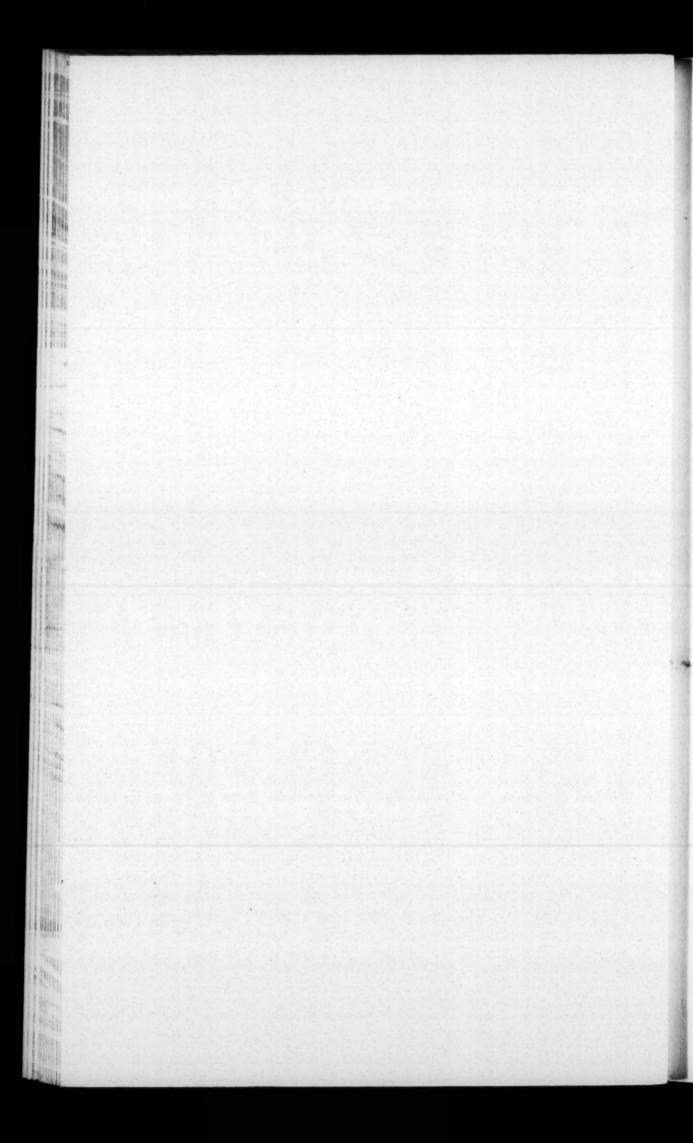
CHRYSANTHEMUM tricolor, foliis duplicato-pinnatifidis, pinnulis linearibus distantibus recurvis, caule erecto ramoso.

CHRYSANTHEMUM tricolor. Andrews's Botanical Repository, pl. 109.

This beautiful Chrysanthemum was brought from Petersburgh by Mr. Fraser, of King's-Road, Chelsea, in 1798, by whom we are informed, that it is an annual of easy culture, growing readily from either seeds or cuttings; it has hitherto been confined to the greenhouse, but perhaps is an hardy plant.

It is probably a native of Barbary or Morocco, having been raised at the royal garden at Kew from seeds sent from that quarter by Mr. BROUSSONET, and has considerable affinity with the trifurcatum of M. DESFONTAINES, sigured in his Flora Atlantica, tom. 1. tab. 335. f. 2.

A less pleasing variety occurs with perfectly yellow flowers.







S. Edwards del Pub. by W. Curtis, S. Geo. Crefcent Mar. 1. 1801. F. Sanfom sculp

SOPHORA AUSTRALIS. BLUE SOPHORA.

Class and Order.

DECANDRIA MONOGYNIA.

Generic Character.

Cal. 5-dentatus, superne gibbus. Cor. papilionacea; alis longiatudine vexilli, Legumen.

Specific Character and Synonyms.

SOPHORA australis, foliis ternatis subsessibles glabris, stipulis ensiformibus. Syst. Vegetab. 391. Ait. Kew. 2. P. 45.

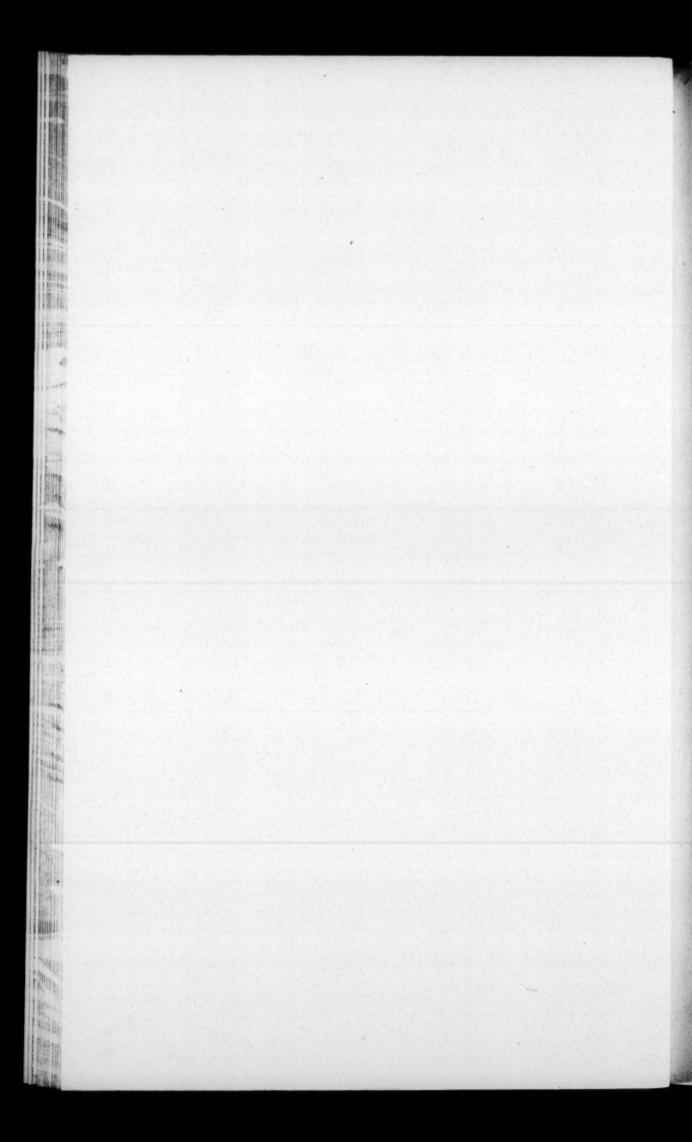
PODALYRIA australis, foliis ternatis petiolatis, foliolis obovato-lanceolatis obtusis; stipulis lanceolatis acutis petiolo duplo longioribus. Spec. Plant. Willdenow, p. 503.

This is an hardy herbaceous perennial, growing well in a light foil and open fituation, and flowering about the beginning of June.

It is a native of Carolina, and an old inhabitant of our gardens, having been cultivated by Mr. Philip Miller

in 1758.

Its near resemblance in habit to some of the Lupins, has occasioned it to be sometimes mistaken for the Sophora lupinoides of Linnaus, which has yellow slowers.







S. Edwards del. Pub. by W. Curtis. S'Goo Crefcent Mar 1.1801 E. Sanfem sculp

CONVALLARIA BIFOLIA. LEAST SOLOMON'S SEAL.

Clafs and Order.

HEXANDRIA MONOGYNIA.

Generic Character.

Cor. fexfida. Bacca maculofa 3-locularis.

Specific Character and Synonyms.

CONVALLARIA bifolia foliis cordatis floribus tetrandris. Syst. Vegetab. 335. Ait. Kew. p. 456.

LILIUM CONVALLIUM minus. Baub. Pin. 304. UNIFOLIUM. Hall. Helv. n. 1240.

MONOPHYLLON. Ger. 330. f. 2. emac. 409.

There are few genera in which the parts of fructification vary so much, both in form and number, as in Convallaria; Linneus makes three divisions of the species, first, such as have bell-shaped slowers, as Lily of the Valley; second, such as have funnel-shaped, as common Solomon's Seal; and third, such as have wheel-shaped, as the present plant; the unripe spotted berry is said to afford a mark of distinction common to the whole; but how sew are there who have an opportunity of seeing this in all the different species?

Most of these plants are ornamental, and many of them have been long cultivated in our gardens for their fragrance, and the beauty of their foliage or slowers; the present small and delicate species was cultivated and sigured by Mr. MILLER

in 1730.

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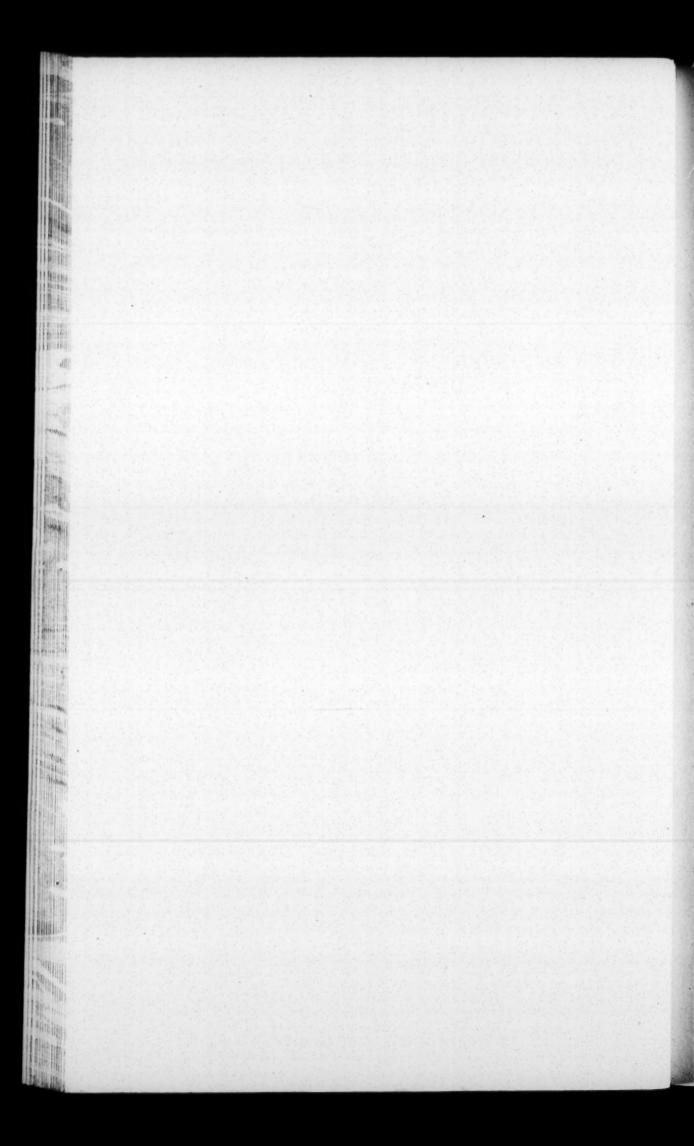
It feldom rifes above the height of four or five inches; the flowering stem is usually surnished with two, sometimes only one leaf, and is terminated by a loose spike of white slowers, which appear in May, and with us are rarely succeeded by fruit.

"It is a native of the North of Europe, Holland, Germany, "Switzerland, and Carniola. Mr. MILLER gathered it near "Haerlem and the Hague, where Mr. RAY had gathered it

" before on the 28th of May in flower." Mart. Mill. Diet.

Is a hardy perennial, increasing greatly by its creeping roots, on which and on other accounts, it is best kept in pots with the smaller alpines; plants which are regarded by me as so many beautiful cabinet pictures, to others they will not appear in the same light.

[&]quot; Non omnes arbusta juvant, humilesque myricæ."







M. Land M. S. C. Curtes St Geo. Crefcent April 1801. F. San

F. Sanforn sculp.

CHIRONIA LINOIDES. FLAX-LEAVED CHIRONIA.

Class and Order.

PENTANDRIA MONOGYNIA.

Generic Character.

Cor. rotata. Pistillum declinatum. Stam. tubo corollæ insidentia. Antheræ demum spirales. Peric. 2-loculare.

Specific Character and Synonyms.

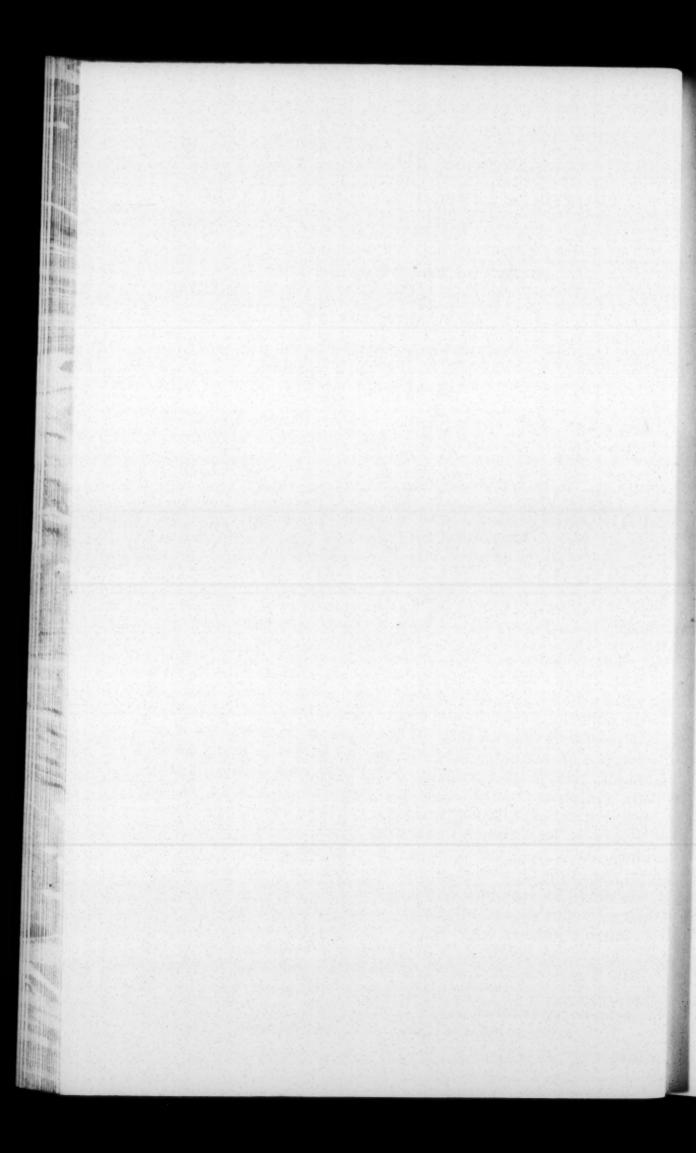
CHIRONIA linoides herbacea foliis linearibus. 1 inn. Syst. Vegetab. ed. 14. Murr. p. 229. Ait. Kew. v. 3. p. 487.

RAPUNTIO affinis lini facie capitis b. spei. Breyn. Gent. 175.

The Chironia baccifera already figured, afforded a fingular inflance of variation from the generic character in its feed veffel; in the pretent species we have as remarkable a one in the antheræ, which do not finally assume the spiral appearance so peculiarly characteristic of the genus; yet in all other respects it is a perfect Chironia, and a very neat pretty greenhouse plant it is, occupying but little room, and enlivening the collection by its blossoms, plentifully produced during most of the year, and especially at the close of summer; it requires to be frequently renewed, which is easily done, as it strikes readily from cuttings; it requires also more warmth in the winter than most greenhouse plants, and as it is apt to go off in cold moist seasons, it will be prudent to keep a pot or two of it on the front shelf of the stove during such unfavourable weather.

LINNEUS describes it as having an herbaceous stem, and Mr. Ayron marks it as an herbaceous plant; but surely it is not herbaceous, in the strict sense of the word, nor is it so regarded by cultivators.

It is a native of the Cape, and was introduced by Mr. Masson in 1787.







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CAMPANULA PUMILA. DWARF-CAMPANULA.

Glass and Order.

PENTANDRIA MONOGYNIA.

Generic Character.

Cor. campanulata fundo clauso valvulis staminiseris. Stigma 3-fidum. Caps. infera, poris lateralibus dehiscens.

Specific Character and Synonyms.

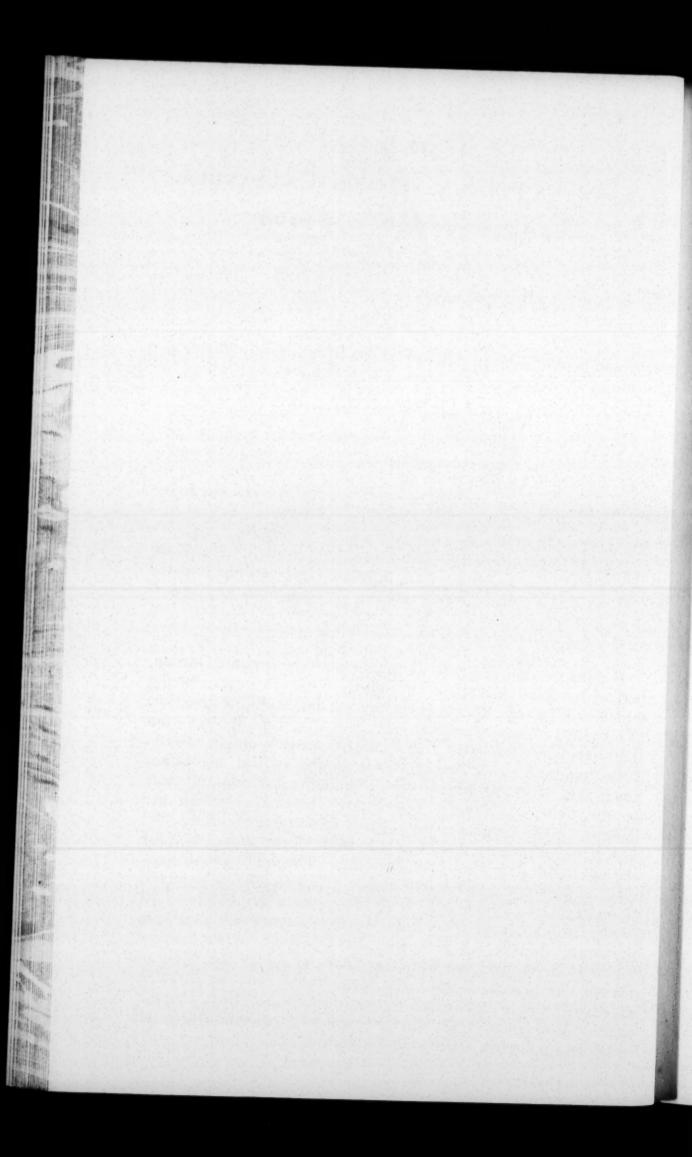
CAMPANULA pumila, foliis radicalibus ovatis crenatis, petiolis complanatis, floribus racemofis fecundis cernuis.

CAMPANULA rotundifolia var. 3. Spec. Plant. 232. Ait. Kew. 1. p. 219.

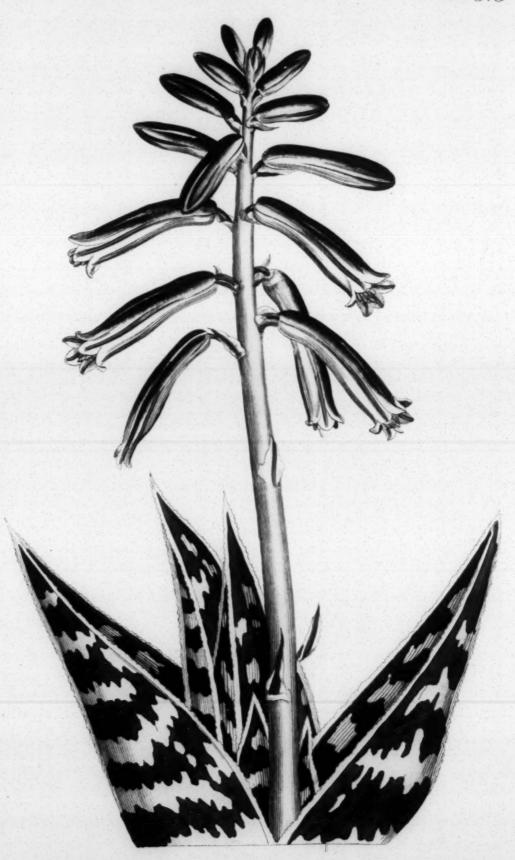
CAMPANUI. A minor rotundifolia alpina. Banh. Prod. 34.

CAMPANULA pufilla, foliis omnibus ferratis, radicalibus cordato-ovatis, firmis nitidis: caulinis linearibus alternis remotis. Jacq. Collett. 2. p. 79.?

Having seen this Campanula cultivated in the Botanic Garden, both at Lambeth-Marsh and Brompton, for many years, during which time it has always preferved its diftinguishing features. We cannot hefitate in confidering it as a diffinct species from the rotundifolia, of which LINNEUS has made it only a variety. It is a plant of much humbler growth, the radical leaves are never reniform, are frequently continued a confiderable way up the stem, and grows upon shorter footstalks, which are flattened, not filiform; they likewife continue during the flowering, forming a mat, whereas those of the rotundifolia for the most part disappear at this season. The cespitosa of Sco-POLI is probably a variety of this. JACQUIN having quoted Scheuchzer's Campanula, fig. 4. It 4 as a fynonym of his pufilla, which appears very diffimilar to ours, makes it somewhat uncertain whether his plant may be the fame, as he has not given us any figure; on which account we adopt the name of pumila, by which it has been long known in the Botanic Garden. There is a white variety; both forts bear a profufion of flowers, and are very ornamental, particularly fuited to adorn rock-work, being hardy perennials.







S. Edwards del. Pub. by W. Curtis. StGeo: Crefcent Apr. 1. 1801. F. Sanfem sculp.

ula.

ALOE VARIEGATA. PARTRIDGE-BREAST ALOE.

Class and Order.

HEXANDRIA MONOGYNIA.

Generic Character.

Cor. erecta, ore patulo fundo nectarifero. Filam. receptaculo inferta.

Specific Character and Synonyms.

ALOE variegata subacaulis, soliis trisariis pictis canaliculatis: angulis cartilagineis, sloribus racemosis cylindricis. Thunb. Aloe, n. 12. Ait. Kew. v. 1. p. 470.

ALOE variegata floribus pedunculatis cernuis racemosis prismaticis: ore patulo æquali. Linn. Sp. Pl. ed. 3. P. 459.

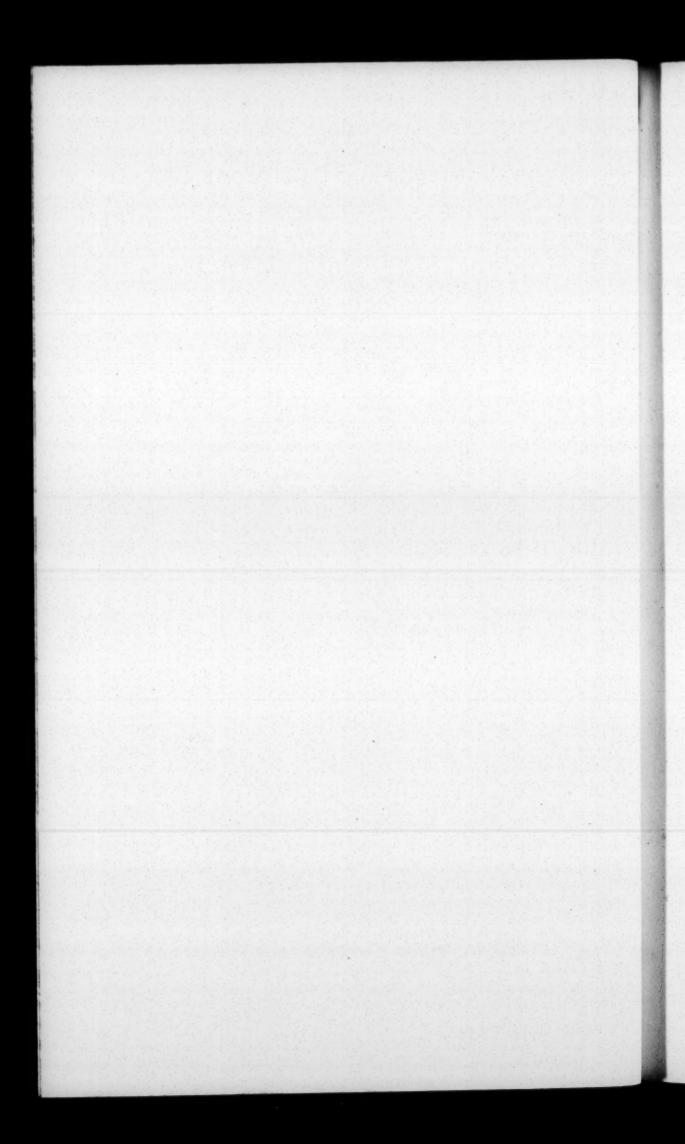
ALOE africana humilis, foliis ex albo viridi variegatis. Comm. prel. 79. 1. 28. var. 27. 1. 27.

So many defirable points unite in this Aloe, that we are not to wonder at its being held in fuch very high efteem by all that have the leaft tafte for plants, especially those of the fucculent kind; we frequently see it nursed up with great care by those who have only the convenience of a parlour window, and succeed better with such than in the greenhouses of many: it grows readily and blows freely but irregularly, during most of the summer months; its soliage is beautiful both in its form and markings, and its slowers are no less handsome; it rarely exceeds a foot or a foot and a half in height, when in slower; is increased by offsets, and requires the same treatment as the Aloe tribe in general.

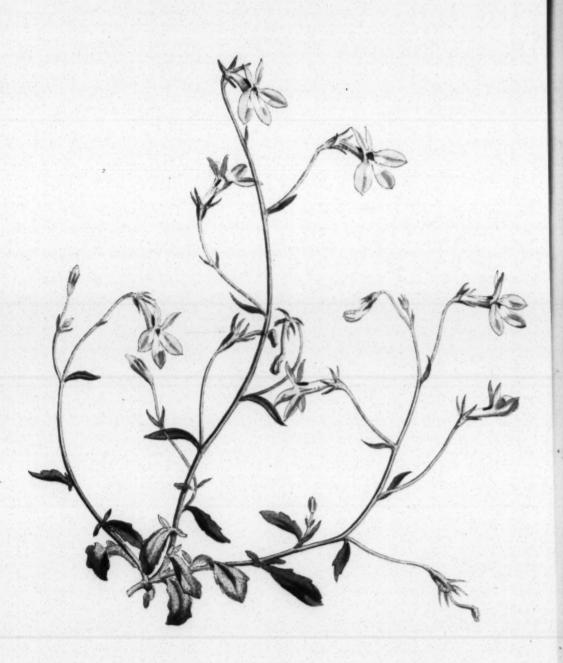
Is a native of the Cape, and was cultivated here by Mr.

FAIRCHILD in 1720, Blair's Bot. Eff.

MILLER informs us, that he raised a variety of it from Cape seeds with broader and more spreading leaves and a taller flowering stem.







LOBELIA BICOLOR. SPOTTED LOBELIA.

Class and Order.

PENTANDRIA MONOGYNIA.

Generic Character.

Cal. 5-fidus. Cor. 1-petala irregularis. Antheræ subcoalitæ, Caps. 2-5-locularis infera.

Specific Character and Synonyms.

LOBELIA bicolor, caulibus patulis foliis inferioribus oblongis dentatis pubescentibus subsessibilatis: labio superiori reslexo.

In so extensive a genus as the Lobelia, so few of which have been accurately figured, or even fully described, it is not to be wondered at if some confusion should prevail. This is

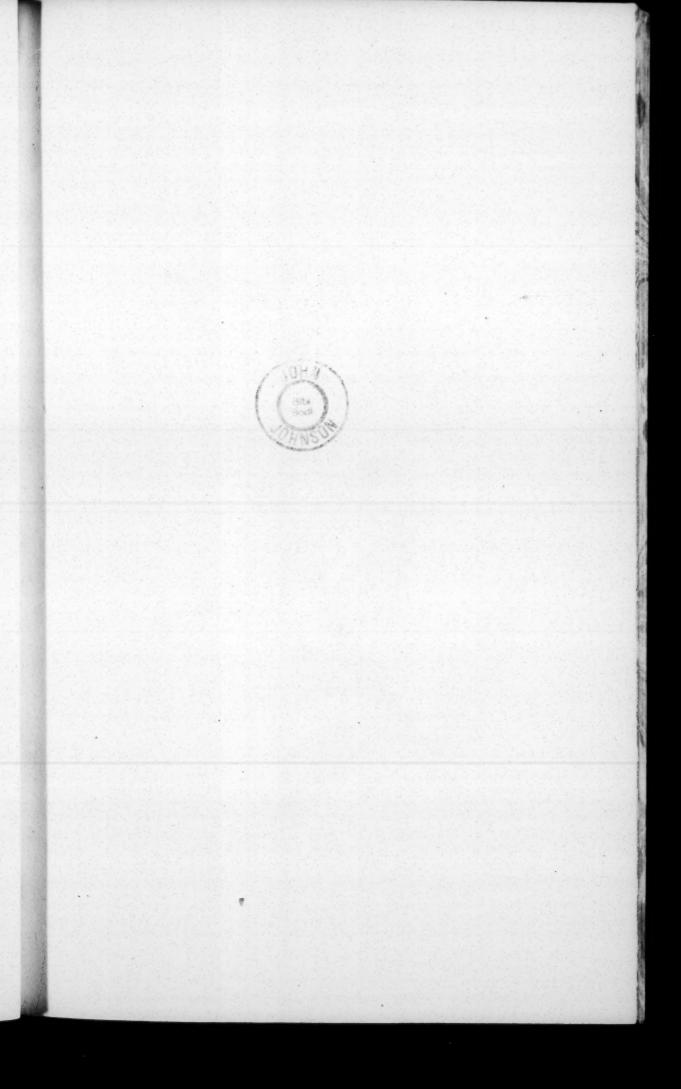
especially the case among the smaller species.

The pretty lively little plant which is here figured, flowered last summer in the Botanic Garden at Brompton, and in some other collections about town; the bright blue corolla distinguishes it at first fight from the pubescens, which has white flowers; we were, however, inclined to confider it only as a variety, but from a confideration of the description and figure, by Mr. SALISBURY, in his Icones plantarum rariorum, it feems to differ in many material points, and poffibly it may be the very plant that he has distinguished from his alyssifolia, the pubescens of the Kew Catalogue, under the name of Lobelia Erinoides; but certainly is not the erinoides of LINNEUS, a smaller, more delicate, trailing plant with flower-stalks shorter than the leaves. agrees so well with the specific character of Lobelia Erinus, as given in the Mantissa Plantarum, that we were once inclined fo to determine it; but upon a careful examination of the specimens in Sir Joseph Banks's Herbarium, it appears to be certainly different from the one which is there marked, as having been compared with the Linnean Herbarium; nor does it appear perfectly to correspond with any specimen in Sir Joseph's extensive collection: we hope therefore to stand excused for having applied a new name and specific character. This we do always unwillingly, and never, when we can be tolerably fatisfied that our plant is the fame that has been previously described.

It is an annual which readily perfects its feeds if brought forward by being fown in a hot-bed in the Spring, and treated

the same as other tender annuals.







S. Edwards del Pub by W. Curtis S. Geo: Crefcent May 1.1801 M. Sanfom sculp

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LITHOSPERMUM ORIENTALE. YELLOW GROMWELL, or Bugloss.



Class and Order.

PENTANDRIA MONOGYNIA.

Generic Character.

Cor. infundibuliformis, fauce perforata nuda. Cal. 5-partitus.

Specific Character and Synonyms.

LITHOSPERMUM orientale, ramis floriferis lateralibus bracteis cordatis amplexicaulibus. Linn. Syst. Vegetab. p. 156.

ANCHUSA orientalis. Sp. Pl. 191.

BUGLOSSUM orientale flore luteo. Tournef. cor. 6. Buxbaum, Cent. 3. p. 17. t. 29. Dill. Elth. 60. t. 52. f. 60.

ASPERUGO divaricat. Murr. in Comment. Gott. 1771. p. 25. t. 2.

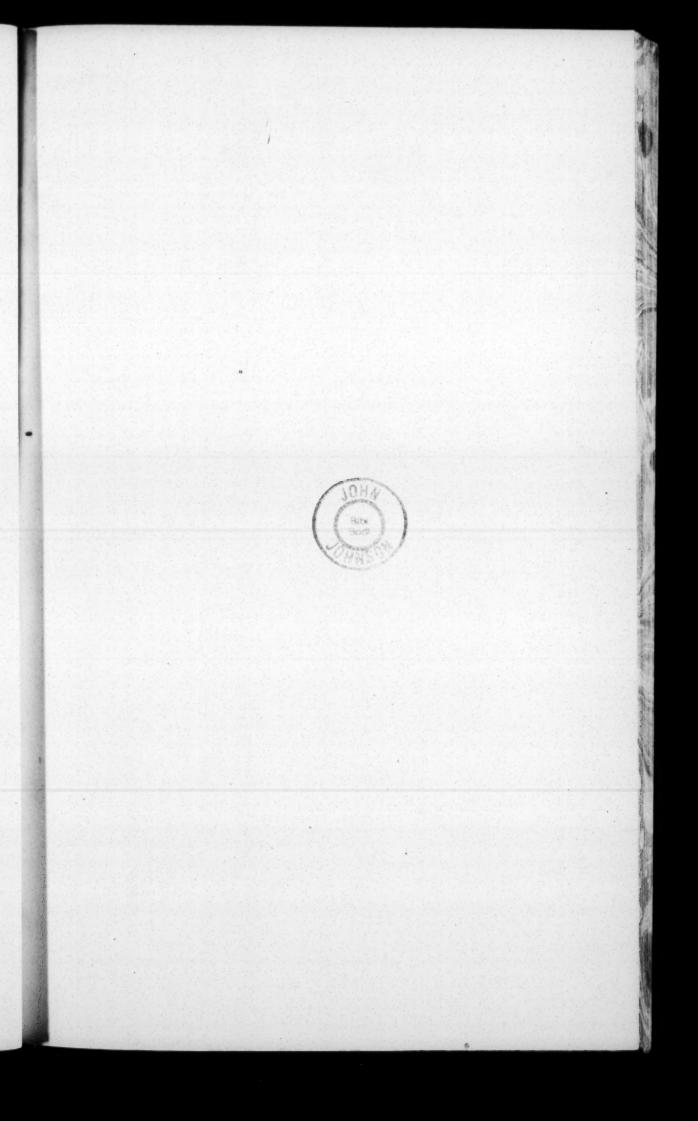
This is a hardy, perennial, herbaceous plant, a native of the Levant, of some value on account of its early flowering and its long succession; the first may be still forwarded by placing it under a frame.

It is propagated by feeds, by cuttings, or by parting its roots in the Autumn, and will grow in almost any fituation.

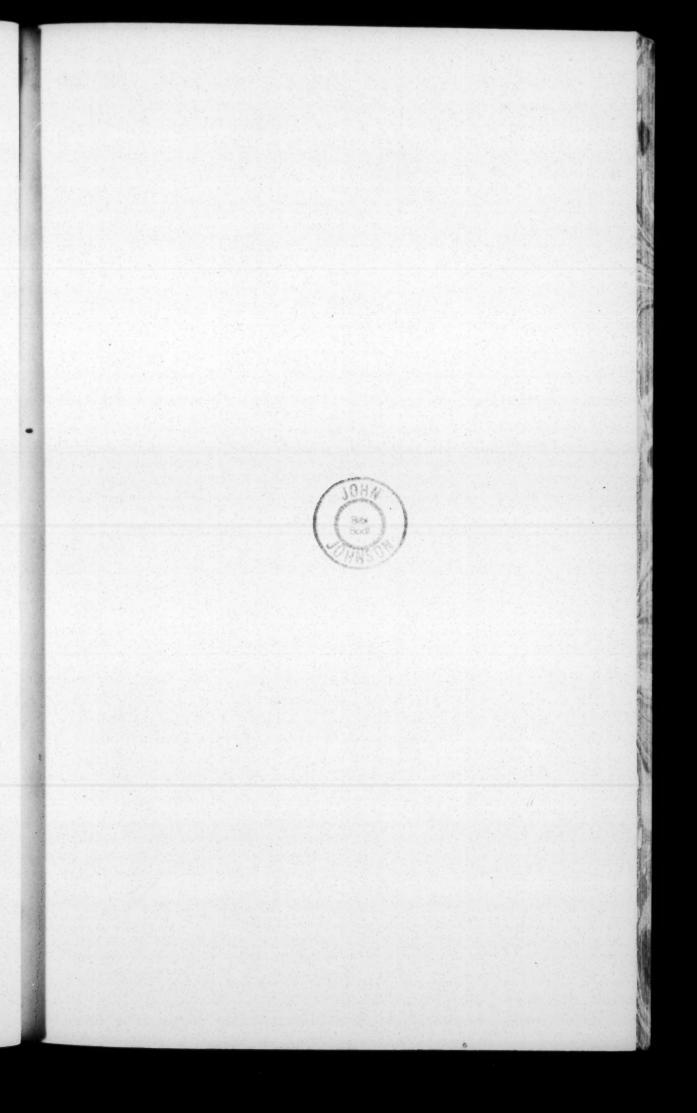
Though cultivated in the Botanic Garden at Chelsea, in the year 1713, it is by no means common.

It flowers in the open ground in May and June, and continues in bloffom the greatest part of the Summer.











SPARMANNIA AFRICANA. AFRICAN SPARMANNIA.



Class and Order.

POLYANDRIA MONOGYNIA.

Generic Character.

Cor. 4-petala, reflexa. Nectaria plura torulosa stamina cingentia. Cal. 4-phyllus. Caps. angulata, echinata, 5-locularis.

Specific Character and Synonyms.

SPARMANNIA africana. Linn. Suppl. Pl. p. 266. Retzii Observationes Botanicæ, f. 5. t. 3.

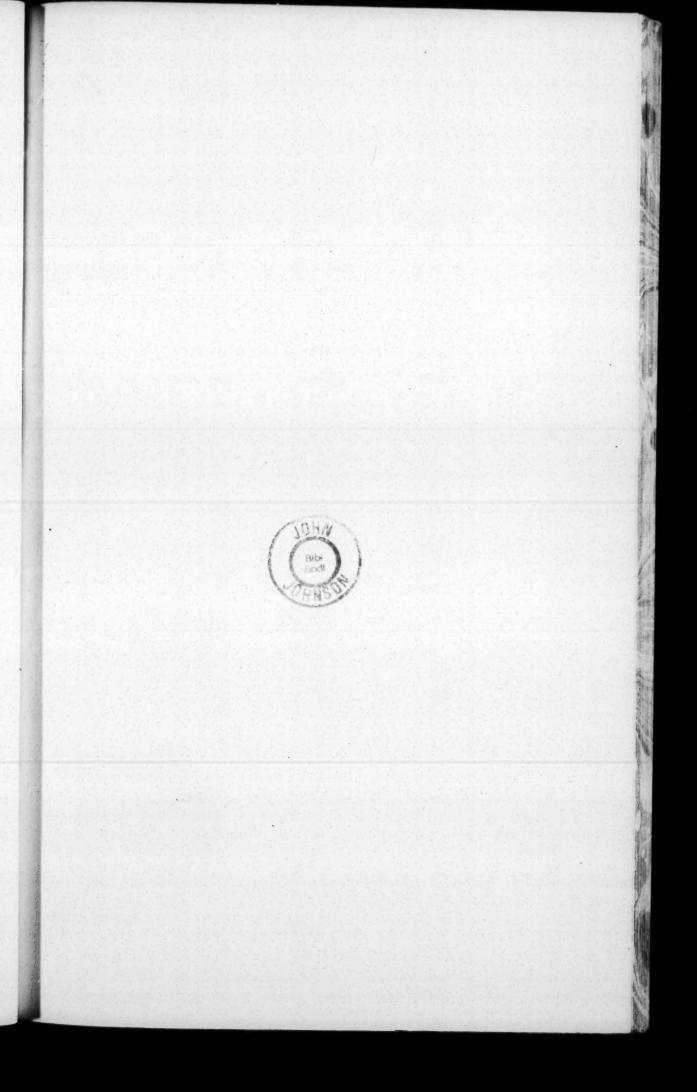
This beautiful shrub is a native of the Cape of Good Hope, from whence it was introduced by the celebrated traveller whose name it bears. It grows to the height of fix feet or more, is thickly divided into alternate branches, finely clothed with large cordate and lobed pendulous leaves upon erect footftalks, making a very handsome appearance even in foliage, in which state it much resembles a sida; its fine umbels of flowers are produced plentifully along the young branches opposite the leaves, in the fame manner as in the common species of Pelargonium, which it is very like in its inflorescence, the flowers nodding before they are expanded, and becoming erect as they approach maturity. The petals, which are of a fnowy white, remain but a short time expanded, being soon reslected with the calyx: this is white like the petals, but covered, as is the whole of the plant, the petals excepted, with fine hairs. The fingular nectaries, the characteristic of the genus, surround the filaments, which they fo nearly refemble, that a superficial obferver might readily confound them; they are very numerous, are shorter than the purple filaments, of a yellow colour, torulose, or nobbed, at the upper part: they have no anthers, though they have purple tips not unlike them. The whole plant abounds with a tasteless mucilage.

The

The description of the Sparmannia in the Supplementum Plantarum, is in most respects very accurate; the petals are there said to be yellow: whether the plant is subject to vary in colour, or that an error has arisen from the examination of dried specimens, we are not at present able to determine.

It was first introduced to the Royal Garden at Kew, from whence it has been distributed to several collections about town, and though at present a scarce plant, will not perhaps long remain so, being readily propagated by cuttings, if treated in the same manner as some of the more tender *Pelargoniums*.

Our figure was drawn from a specimen which slowered in great perfection the last month, at the Nursery of Messrs. Whitley and Co. at Old Brompton. Except at Kew, we have not heard of its having slowered elsewhere.





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[517]

LAVATERA THURINGIACA. GREAT-FLOWERED LAVATERA.

Class and Order.

MONADELPHIA POLYANDRIA.

Generic Character.

Calyx duplex, exterior 3-fidus. Arilli plurimi monospermi.

Specific Character and Synonyms.

LAVATERA thuringiaca caule herbaceo, fructibus denudatis, calycibus incifis. Linn. Syft. Vegetab. ed. 14.

Murr. p. 626. Facq. Fl. Austr. v. 4. t. 311.

LAVATERA thuringiaca foliis inferioribus cordatis crenatis fubrotundo-lobatis fummis hastatis, pedunculis longis, folitariis, unisloris. Linn. Syst. Nat. ed. 13. Gmel. 1057.

ALTHEA thuringiaca grandiflora. Dill. Hort. Elth. 9. 1. 8.

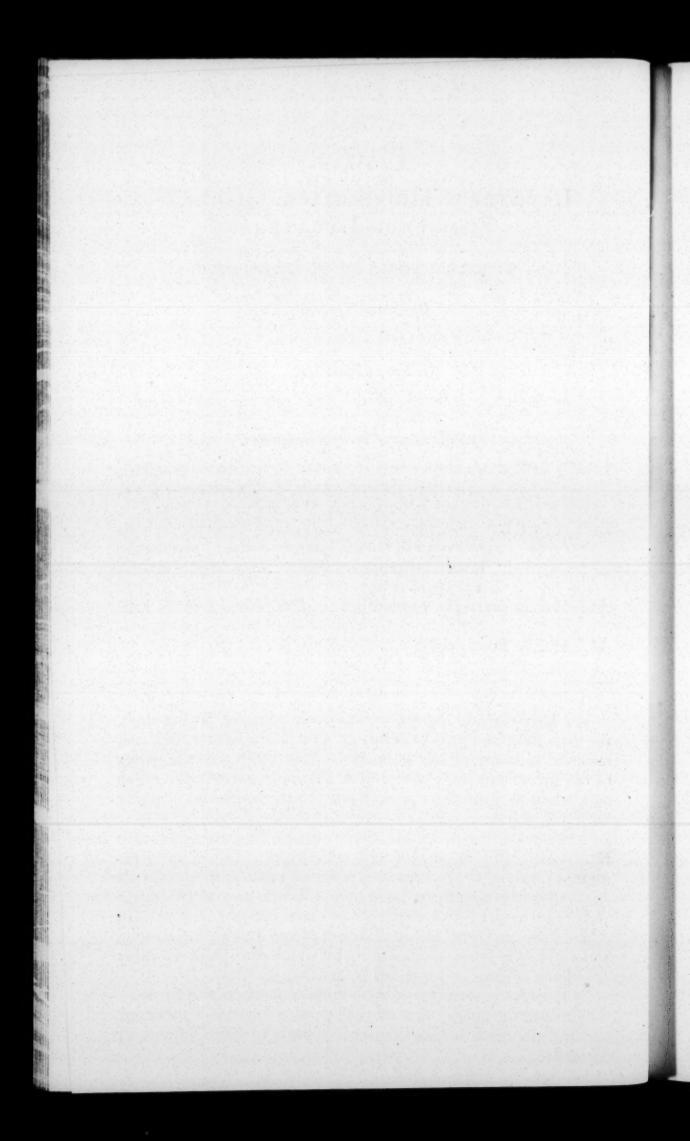
ALTHÆA flore majore. Baub. Pin. 316.

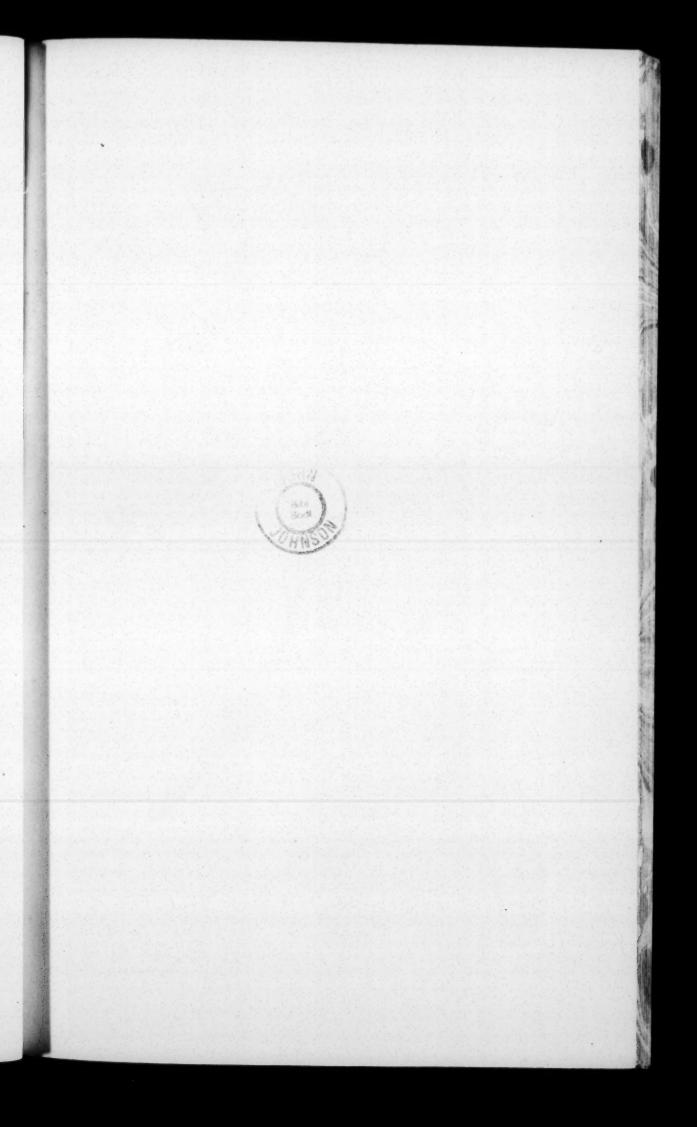
We have already figured in this work a species of Lavatera, the trimestris, the two varieties of which, the white and red, may vie with any of our annuals in contributing to the gaiety of the flower borders; the present species is a hardy perennial, and when it grows in perfection, produces slowers equally large.

Though cultivated by Mr. Sherard in the year 1732, it is rarely met with in any of our collections; yet as an ornamental plant, it is certainly deserving of culture, especially by those who have large gardens, and who aim at great variety.

It is a native of Thuringia, as its name imports, and various parts of the North of Europe; flowers from July to September, and ripens its feeds in Autumn, by which the plant is eafily raised, or it may be increased by parting its roots.

In the Hortus Kewensis it is by mistake marked as a shrub. The base of the division of each petal is singularly puckered, a character which authors do not appear to have sufficiently noticed.







S. Edwards Ad Pub. by W. Curtes & Goo. Oregrent June 1 1801 P Somen soil

PELARGONIUM TOMENTOSUM. PENNYROYAL CRANE'S-BILL.

Class and Order.

MONADELPHIA DECANDRIA.

Generic Character.

Cal. 5-partitus: lacinia suprema desinente in tubulum capillarem nectariferum secus pedunculum decurrentem. Cor. 5petala, irregularis. Fil. 10 inæqualia, quorum 3 (raro 5) castrata. Fruet. 3-coccus, rostratus: rostra spiralia introrsum barbata.

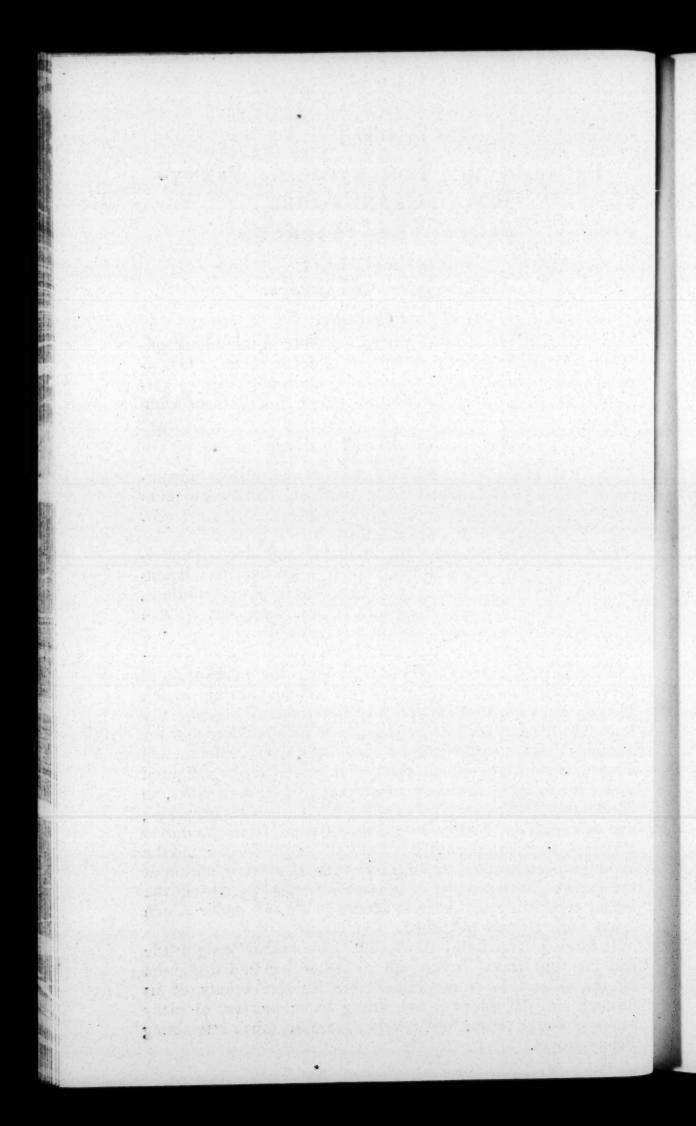
Specific CharaEler and Synonyms.

PELARGONIUM tomentosum, umbellis multisloris subpaniculatis soliis cordatis, hastato quinquelobis villosis mollissimis. Spec. Pl. edit. Willdenow, 677.

PELARGONIUM tomentosum, umbellis multisloris simplicibus compositisque, foliis cordatis subquinquelobis, serratis, tomentosis, mollissimis, caule carnoso. Jacq. Icon. rar. 3. tab. 537. Collect. 5. p. 240.

This species, although introduced since the publication of AITON'S Hortus Kewensis, is now very common, being a quick grower, and very easily propagated by cuttings. It is generally known in the gardens by the trivial name of piperitum, and our gardeners usually understand by tomentosum a very different and a more rare and tender kind, the blattarium of Jacquin, sigured under the name of Geranium tomentosum, by Mr. Andrews, in his Botanist's Repository, pl. 115; but as our plant has been long ago described and sigured by Jacquin, in his Icones plantarum rariorum, who has called it Pelargonium tomentosum, and the same has been adopted by Willdenow, in his new edition of the Species Plantarum; it is become necessary to correct the vulgar appellation, in order to adhere to a name under which it has been already published.

It forms a large bushy shrub, but the branches being brittle and the tops heavy, is very apt to be broken and disfigured by the wind. It is not remarkable for the beauty of its slowers, and the odour is too strong to be pleasant to many persons, though to others it is very agreeable, much resembling Penny-Royal.







" Edwards del. Pub by W. Curtis, S. Geo. Crefcent June 1. 1801. F Sanjam sculp

LILIUM PHILADELPHICUM. PHILADELPHIAN LILY.

Class and Order.

HEXANDRIA MONOGYNIA.

Generic Character.

Cor. 6-petala, campanulata: linea longitudinali nectarifera. Caps. valvulis pilo cancellato connexis.

Specific Character and Synonyms.

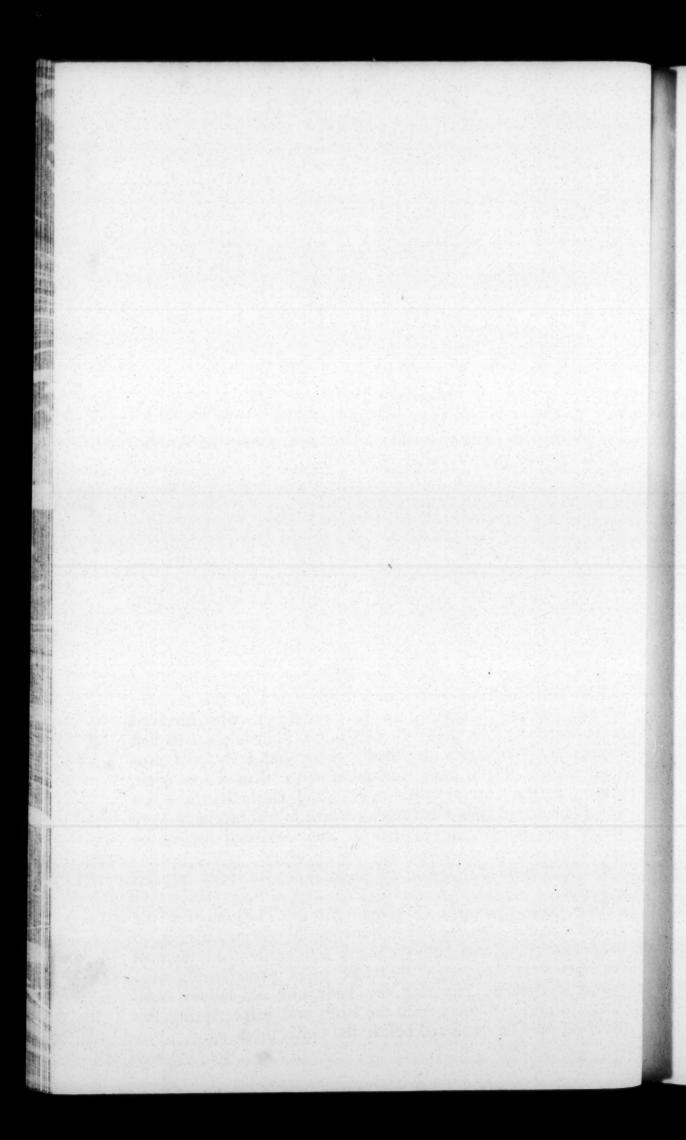
LILIUM philadelphicum foliis verticillatis floribus erectis, corolla campanulata: petalis unguiculatis. Spec. Pl. 435. Ait. Hort. Kew. 1. p. 431. Miller Icon. Plant. t. 165. f. 1.

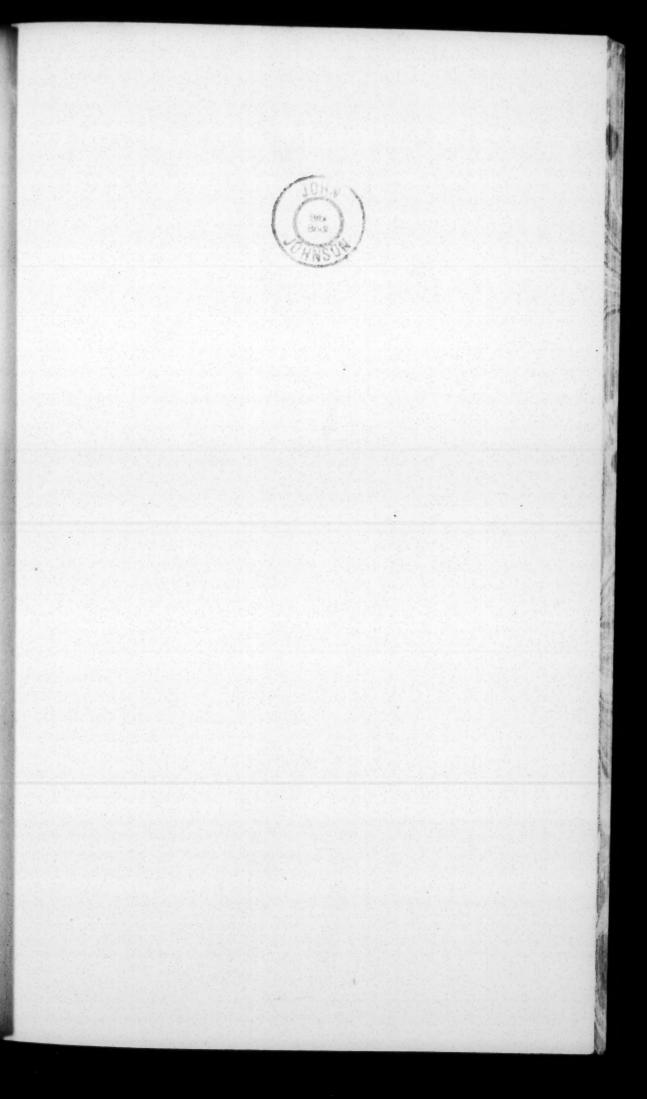
The Philadelphian Lily was first cultivated in this country by Mr. Philip Miller, in the year 1757, who received roots of it from Mr. John Bartram of Philadelphia, its first discoverer. Its bulbs are small, white, and scaly, and produce each a single stem, somewhat more than a foot high, bearing at the summit two slowers, and clothed with a sew whorls of entire lanceolate leaves, which in our specimen were longer and more reslexed than as described and sigured by Mr. Miller.

It flowers in July, but produces no ripe feed in this country.

The same treatment is proper for this Lily as for the Lilium Catesbæi, figured in the Botanical Magazine, pl. 259.

MILLER fays, that both these are less hardy than some of the other sorts, and ought therefore to be protected in very severe winters by covering the beds with old tan or coalashes, to preserve them from the frost, and in the spring this covering may be removed before the bulbs shoot up.







Edwards del . To We write S' Good Crefeent June 1.1901 ES whom saids

MORÆA SPIRALIS. SPIRAL-FLOWERED MORÆA.

Class and Order.

TRIANDRIA MONOGYNIA.

Generic Character.

Cor. submonopetala 6-partita inæqualis: laciniis ereclis. Stigmata 3 petaliformia.

Specific Character and Synonyms.

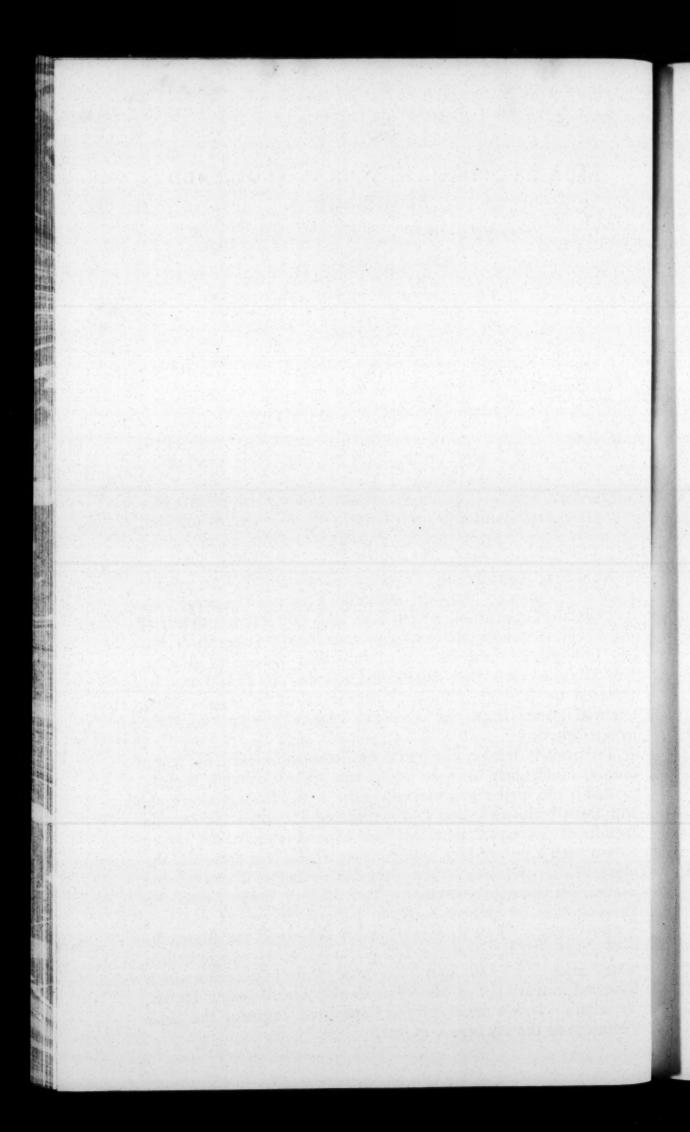
MORÆA spiralis caule compresso articulato multisloro, foliis ensisformibus erectis, sloribus axillaribus.

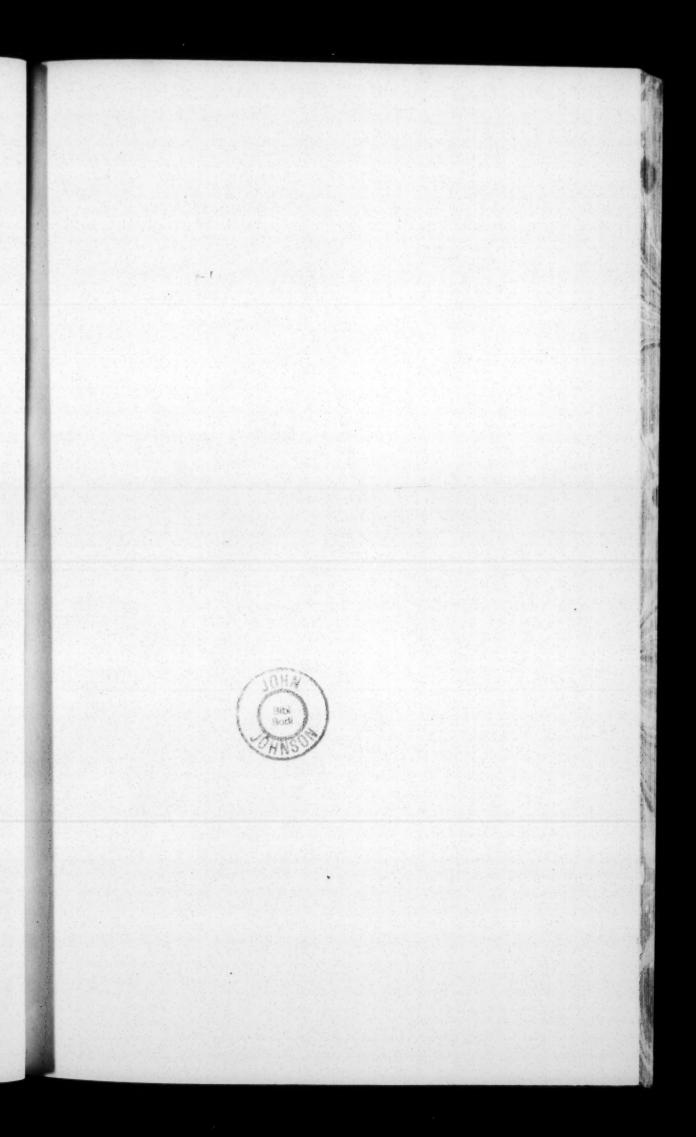
Linn. Suppl. 99.

MORÆA spiralis scapo compresso articulato, foliis erectis, sloribus alternis subsecundis. Sp. Pl. edit. Willdenow, 1. 240. Thunberg. Diss. No. 2. Prod. p. 10.

As this is undoubtedly the same plant which Thunberg has called Morea Spiralis, we rather continue the name than attempt any innovation, which is at least much better deferred till the whole samily shall undergo a revision. It certainly has but little affinity with several of the other species of Morea, and Willdenow has questioned whether it should not be referred to Aristea: it seems however to differ in too many essential points from the Aristea cyanea to admit of their being united.

The root is stringy, the leaves ensiform and erect; the scape simple, erect, near a foot high, two-edged, jointed, slightly twisted; the spatha two-valved, entire; the slowers alternate, with short peduncles, and mostly directed one way; the corolla consists of six equal petals, which expand evenly, are white within with a purple base and become transparent between the veins as they decline; when they close, they twist round one another in a curious manner; the style is longer than the stamens, and terminates in three fringed stigmas of a bright purple colour. Thunberg probably described the stigma as simple and villous, from examining it at too early a stage before it was expanded. Our sigure was drawn from a specimen which slowered in April last at Mr. Woodford's, at Belmont-House, Vauxhall. It is a native of the Cape, and requires the same treatment as the Aristea cyanea.







S.Edwards del Pub by W. Curtis, S. Geo Orefeent July 1.1601. E. Sanfem souls

OROBUS VERNUS. EARLY-FLOWERING OROBUS OF BITTER-VETCH.



Class and Order.

DIADELPHIA DECANDRIA.

Generic Character.

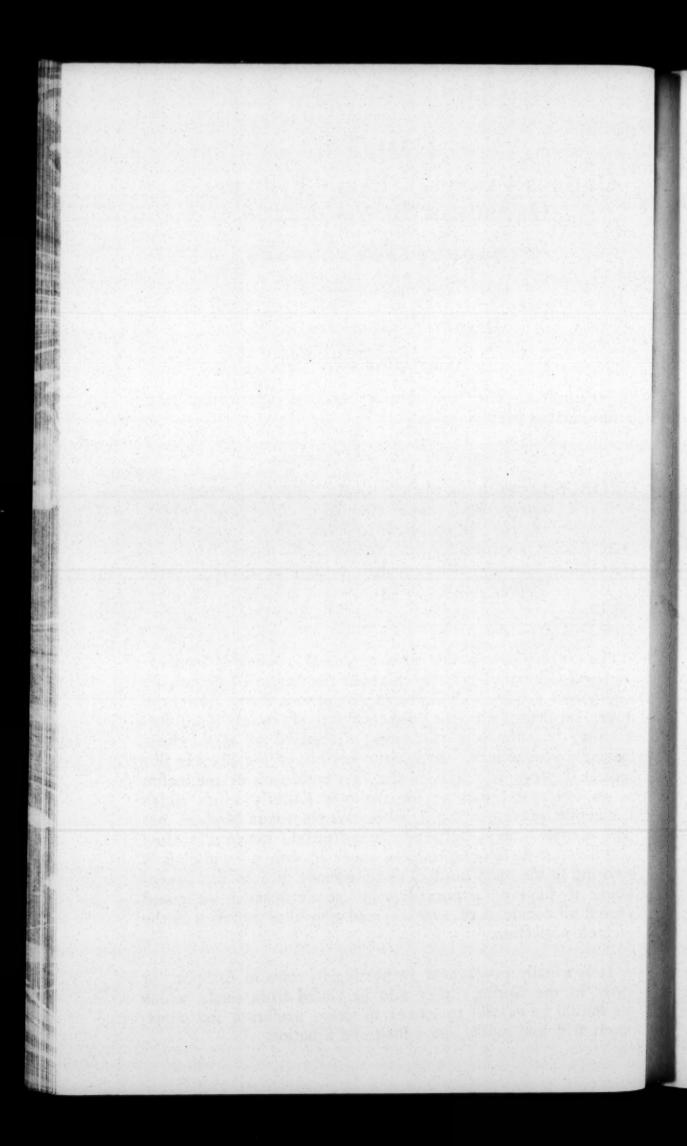
Stylus linearis. Cal. basi obtusus: laciniis superioribus pro-

Specific Character and Synonyms.

OROBUS vernus foliis pinnatis ovatis, stipulis semisagittatis integerrimis, caule simplici. Linn. Syst. Veget. ed. 14. Murr. p. 661. Ait. Kew. v. 3. p. 38.
OROBUS sylvaticus purpureus vernus. Baub. Pin. 351.
OROBUS venetus. Blue upright everlasting Pease. Park. Parad. p. 337. f. 13.

The Orobus vernus is a hardy perennial, a native of Switzerland and Germany, growing to about the height of a foot, or a foot and a half, and producing numerous shewy slowers in spikes, at first of a bright purple colour, afterwards blue, frequently, but not in all situations, succeeded by seed-vessels, sparingly productive of seeds; the fertility of the plant in this respect depends as much on the savourableness of the season as on soil and situation; for the cold Easterly winds which frequently prevail in April, when this plant is in blossom, not only mar its beauty, but render it unfruitful; hence it is often necessary on these occasions, to cover it with a hand-glass if growing in the open border, or to remove it into the greenhouse if kept in a pot; but by gentle forcing we guard against all accidents of weather, and may thus possess it in the greatest persection.

It is usually propagated by parting its roots in Autumn, or early in the Spring; may also be raised from seeds, which we should be careful to gather in time; prefers a soil moderately stiff and moist, and a sheltered situation.







S. Edwards del Pub. by W. Curlis S. Goo: Crefcent July 1.1801. F Sanforn sculp

INIA PATENS. SPREADING-FLOWERED OF CRIMSON INIA.

Class and Order.

TRIANDRIA MONOGYNIA.

Generic Character.

Cor. 6-partita campanulata regularis. Stigmata 3.

Specific Character and Synonyms.

IXIA patens; tubo filiformi, limbo campanulato-patente: laciniis oblongis, filamentis coaretatis erectis, stigmatis laciniis antheras subæquantibus. Gawler Enfat. African. inedit.

IXIA patens foliis subensisformibus glabris, racemo terminali, corollis campanulatis patulis: laciniis alternis angustioribus, filamentis erectis. Aiton Hort. Kew. t. 1.

IXIA aristata. Schnev. Icon. tab. 32.

IXIA flaccida. Salifb. prodrom. 35.

IXIA concoler. Ibid. 36. an hujus varietates? IXIA conica. Ibid. 36.

In this very numerous family, in which even the limits of the genus are as yet far from being well afcertained, there is often great difficulty in tracing out the fynonyms of preceding authors. In this inflance we acknowledge ourselves entirely indebted to John Bellenden Gawler, Esq. from whose labours we may soon expect to see this difficult subject elucidated, as he is about to publish a new arrangement of the natural order of Ensatæ.

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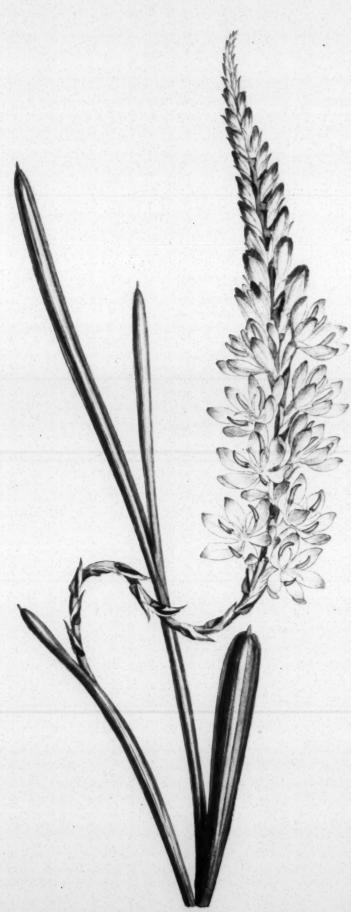
This very shewy Ixia, the brilliancy of whose slowers it is impossible to imitate by art, is a native of the Cape, and has been of late years frequently imported from Holland by the name of Ixia kermesina; but was, as we are informed by Mr. Aiton, first introduced into this country by the late Dr. William Pitcairn in the year 1779.

It varies much in the breadth and length of the fegments of the limb, and in colour from a deep crimfon to a light vermillion; in the length and breadth of the leaves, which are fometimes nearly lanceolate, at others linear-ensiform, sometimes nearly equal to the stem, sometimes not half the length. Some varieties have, as in our figure, a small greenish star at the base, in others the colour is uniform. All are scentless and slower nearly at the same time. It varies also much in the number of slowers, and the scape is sometimes simple, at others a little branched.

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IXIA FISTULOSA. HOLLOW-LEAVED IXIA.

Class and Order.

TRIANDRIA MONOGYNIA.

Generic Character.

Cor. 6-partita campanulata regularis. Stigmata 3.

Specific Character and Synonyms.

IXIA fishulofa; foliis teretibus fishulosis obtusissimis innocue mucronatis, scapo slexuoso, sloribus spicatis distichis. IXIA teretifolia. Herbar. Banks.

GLADIOLUS fistulosus spica disticha soliis teretibus sistulosis. Jacq. Hort. Schoenbr. tom. 1. tab. 16.

The Ixia fiftulofa of the Botanist's repository having been already figured by Jacquin, and called radiata, ought to retain that name *; we therefore feel ourselves at liberty to adopt this, although for a very different plant. We have rather ranked it with Ixia than Gladiolus, because of the near affinity it bears to the Ixia spicata and plantaginea of Willdenow, which is so great as to require seeing them all in a living state to determine whether the three are really distinct or merely varieties of each other. It agrees too with the character of this genus in the regularity of the corolla, and in not having the filaments and style bent down as in Gladiolus.

It grows from a small round bulb, which is covered with a brown fibrous coat; the leaves are perfectly smooth, round,

* Vide Recensio Plant, Reposit, Botanic, No. 4.

inflated,

inflated, larger towards the end, very obtuse, with a small fost point, or mucro; the scape is a great way enclosed in the sheathing leaves, the slowering part only being protruded, which generally bends down and then rises as in the sigure. The slowers form an imbricated distich spike, are without scent, and arise from a spathe of three valves. In the lower part of the spike, and sometimes for the whole length, no slowers are produced, but a small bulb is contained in the outer valve of the spathe, of the size and form of a grain of oat, which JACQUIN considered as an abortient slower enclosed in the internal valves of the spathe; but Mr. GAWLER having planted these bodies they all grew, which proves them to be real bulbs.

The IXIA fiftulofa is a native of the Cape of Good-Hope, and that from which our figure was drawn was imported from thence by Ed. Woodford, Esq. in whose collection it flowered in June 1800. It has been also imported by Mr. Grimwood, Nurseryman, at Brompton; and the specimen preserved in the Herbarium of Sir Joseph Banks, marked IXIA teretisolia, slowered at Mr. Malcolm's, at Stockwell, in 1791.

It feems to be rather shy of flowering, being apt to produce bulbs instead of flowers; by these, however, as the experiment of Mr. GAWLER shews, it may be readily propagated.

(OHAN)

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PELARGONIUM PULCHELLUM. NONESUCH PELARGONIUM OF CRANE'S-BILL.

Class and Order.

MONADELPHIA HEPTANDRIA.

Generic Charaffer.

Cal. 5-partitus: lacinia suprema definente in tubulum capillarem neclariferum secus pedunculum decurrentem. Cor. 5-petala irregularis. Filamenta 10 inæqualia: quorum 3 (raro 5) castrata. Fructus 5-coccus rostratus: rostra spiralia: introrsum barbata.

Specific Character.

PELARGONIUM pulchellum; subacaule, scapo diviso, soliis oblongis lobato-pinnatifidis, petiolis alatis.

For this hitherto undescribed species of Pelargonium we are indebted to Mr. Alderman HIBBERT, in whose garden at Clapham-Common the choicest gifts of Flora are cultivated on a most magnificent scale. Not less with a view to the promotion of the science of Botany, than the gratification of his own taste and the insuring a supply of rare plants, this gentleman was induced, at his own expence, to fend a collector to the Cape of Good Hope, who, amongst many others, sent home this beautiful one, which flowered in the stove at Clapham in April last. It is particularly distinguished from all its congeners by the winged footstalks; these wings are of a more firm and rigid texture than the rest of the leaf, and as this perishes they change to a brown colour, become more erect, and, like a bunch of small holly leaves, protect the crown of the root from being browfed, a circumstance we learned from the examination of a dried specimen sent by Mr. Masson, and preserved in the Herbarium of Sir Joseph Banks.

The

The whole plant is hairy and smells slightly of Tanfy.

It has only five fertile stamens, as is, we believe, common to most, if not all, the turnip and tuberous-rooted species. These likewise differ from the caulescent species, in that the flower-buds do not nod, but rise out of the involucrum erect before they open. Its feed-veffels are deflected. It is a usual circumstance with most of the genus to have a joint at the base of the proper flower-stalk more remarkable in some species than in others. We were at first much struck with observing this joint in our plant to be situated from one-third to nearly half the space between the base and the flower; but in the native specimen we find this is not the case, and are therefore inclined to impute it to the heat of the stove. In the same collection we perceived another Pelargonium, in many respects resembling this, with white flowers, but whether it be a distinct species or merely a variety we cannot at present determine.

It is to be treated as one of the tenderer forts.



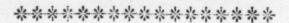
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ANTIRRHINUM TRIORNITHOPHORUM. THREE-BIRD-BEARING SNAP-DRAGON.



Class and Order.

DIDYNAMIA ANGIOSPERMIA.

Generic Character.

Cal. 5-phyllus. Corollæ basis deorsum prominens, nectarifera. Caps. 2-locularis.

Specific Character and Synonyms.

ANTIRRHINUM triornithophorum, foliis quaternis [ternisque] lanceolatis, caule erecto ramoso, floribus [ternis] pedunculatis. Spec. Pl. 853.

LINARIA Americana maxima, purpureo flore. Herman. Lugdb. 377.

LINARIA flore purpureo Americana. Riv. mon. t. 84. fig. bona.

It is rather furprifing that this Antirrhium, the most shewy perhaps of the whole genus, though apparently neither particularly tender nor difficult of propagation, should be almost unknown in this country*; notwithstanding it was cultivated by Professor Herman, in the Botanic Garden at Leyden, more than a century since. The Professor remarks, that it has a creeping root, by which it dissuffs itself widely, and puts forth fresh shoots every year, by which we may understand, that it is sufficiently hardy to bear the Dutch winters; he tells us also, that it grows to the height of a man. Kept in a pot and treated

^{*} It is not mentioned in the Kew Catalogue; we find, however, that it was in Dr. Fothergill's Garden at Upton, in the year 1779.

as a greenhouse plant, it rises with several stems, three or four feet in length, and continues to flower during great part of the Summer, but produces no feed. The leaves grow in whorls of three, four, or five, but generally three at the upper part. The flowers constantly grow by threes upon erect peduncles, to which they are attached nearly horizontally with their mouths turned towards one another, fo as to form a striking resemblance to three birds, from whence the name of triornithophorum, or three-bird-bearing. It has been for some years cultivated in the Royal Garden at Kew, but we do not know of its having yet found its way into any other collection except that of EDWARD WOODFORD, Efq at Vauxhall, from whence our drawing was made. It is a native of North-America, and of Portugal; and from what is remarked above, might probably be better treated as a hardy herbaceous perennial. It may be increased by cuttings or parting the roots.

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CORNUS FLORIDA. GREAT-FLOWERED CORNEL, or DOGWOOD.

Clufs and Order.

TETRANDRIA MONOGYNIA.

Generic Character.

Involucrum 4-phyllum fæpius. Petala supera 4. Drupa nucleo biloculari.

Specific Character and Synonyms.

CORNUS florida, arborea, involucro maximo: foliolis obcordatis potius apice indentatis.] Spec. Pl. 171. Schmidt. Arb. 2. p. 6. t. 62.

CORNUS mas Virginiana. Catefb. Carolin. t. 27.

In the temperate regions of North-America this tree is much spoken of for its beauty, rising from ten to twenty seet in height, agreeable in its soliage, and covered in the Spring and early part of the Summer with a profusion of white or sometimes rose-coloured flowers; nor does it want beauty even in the gloomy months of Winter, from the quantity of red berries which it bears, and which at that season afford sustenance to the sinest warbler of the woods of America, the celebrated mocking bird (Turdus Orpheus) emphatically called in the Indian language, the Hundred-Tongued Bird.

The flowers, which are not really such, but are in fact an involucrum, in the bosom of which lie the small and, in appearance, insignificant slowers, begin to come out before the leaves; but, as they expand or rather increase slowly (for Catesby tells us, that they are fully formed when they first come out not larger than a sixpence, but increase gradually in size to the breadth of the hand) the tree is in perfect soliage before they arrive at their sull growth. The leaves of the involucrum would hardly have been called obcordate had Linneus had an opportunity of seeing them in a living state; they approach to this shape by an indentation at the very point of the leaf, as if the four points had been nipped together whilst in the bud, a form which the skill of our draughtsman has enabled him to express far better than has been done by any preceding artist.

It is a tree of flow growth, and in Europe has, we believe. rarely arrived to any very confiderable fize. That which afforded the subject of our present figure is, perhaps, almost the only one in this country that can be faid nearly to rival those of its native foil. It grows in the Duke of MARLBOROUGH'S garden at Sion-Hill, is about fixteen feet high, and spreads at least eighteen, has a straight trunk about fix feet in length before it branches, measuring two feet in circumference a yard from the ground; the bark much resembles an elm of the fame fize. This beautiful tree has flowered freely for many years past, but unfortunately produces no fruit. Its age is unknown, but as we have evidence of its being cultivated at Chelsea by MILLER, in 1739, it is probable that its origin may not be of much later date. We are much obliged to Mr. WHITMAN, his Grace's Gardener, for fending us notice of this tree, and favouring us with specimens and with the above dimensions.

"It is most certainly propagated by seeds sent from Virginia, which should be sown immediately after their arrival, in boxes or pans of sandy garden mould, and covered with wet moss, to prevent the earth from drying, and placed where they may be protected from frost. These precautions are the more necessary, as the seed will lie in the ground till the second or third year before they germinate; and as the young plants generally come up the latter-end of Summer, they are then in too tender a state to resist the frost without some covering. A shady and sheltered situation promotes its growth and secures its preservation." Schmidt Oster Baumzucht.

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S.Edwards del. Pub. by W. Curtis S. Geo. Crefcent Aug. 1.1801 E. Sanfom sculp.

ZINNIA ELEGANS. VIOLET-COLOURED ZINNIA.

Class and Order.

SYNGENESIA POLYGAMIA SUPERTLUA.

Generic Character.

Recept. paleaceum. Pappus aristis 2 crectis. Cal. ovatocylindricus, imbricatus. Flosculi 5-10 radii persistentes integri.

Specific Character and Synonyms.

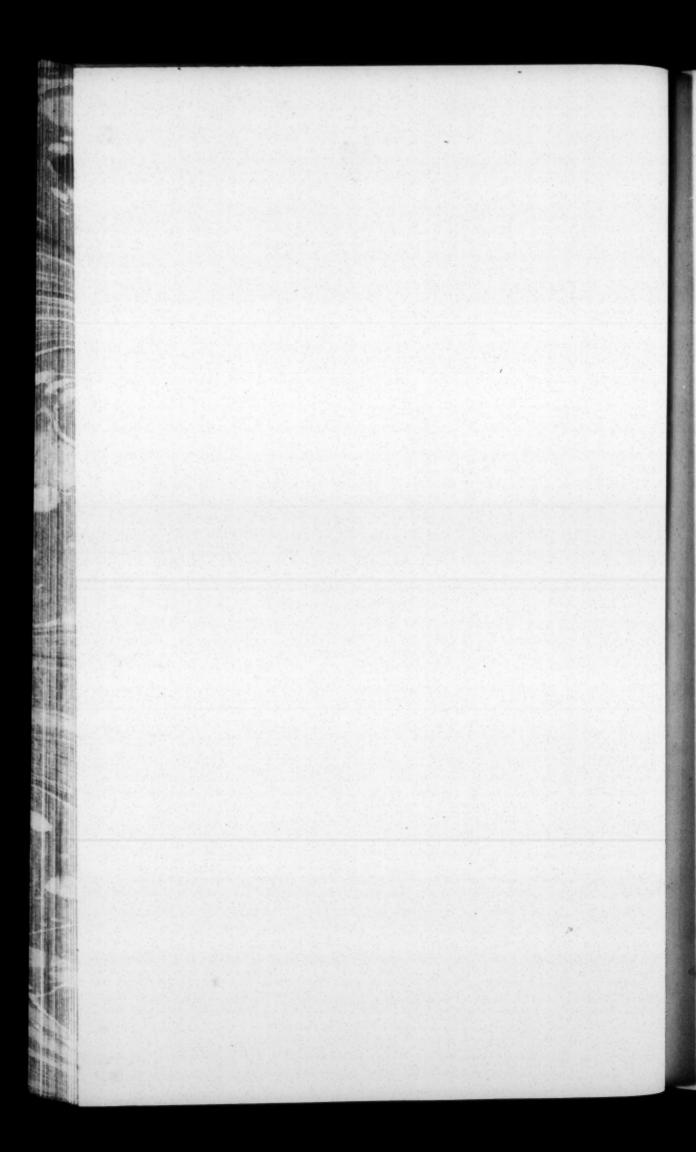
ZINNIA elegans, foliis amplexicaulibus, floribus pedunculatis, hermaphroditorum feminibus brevissime mucronatis. Jacq. Icon. rar. 589. Coll. 5. 152.

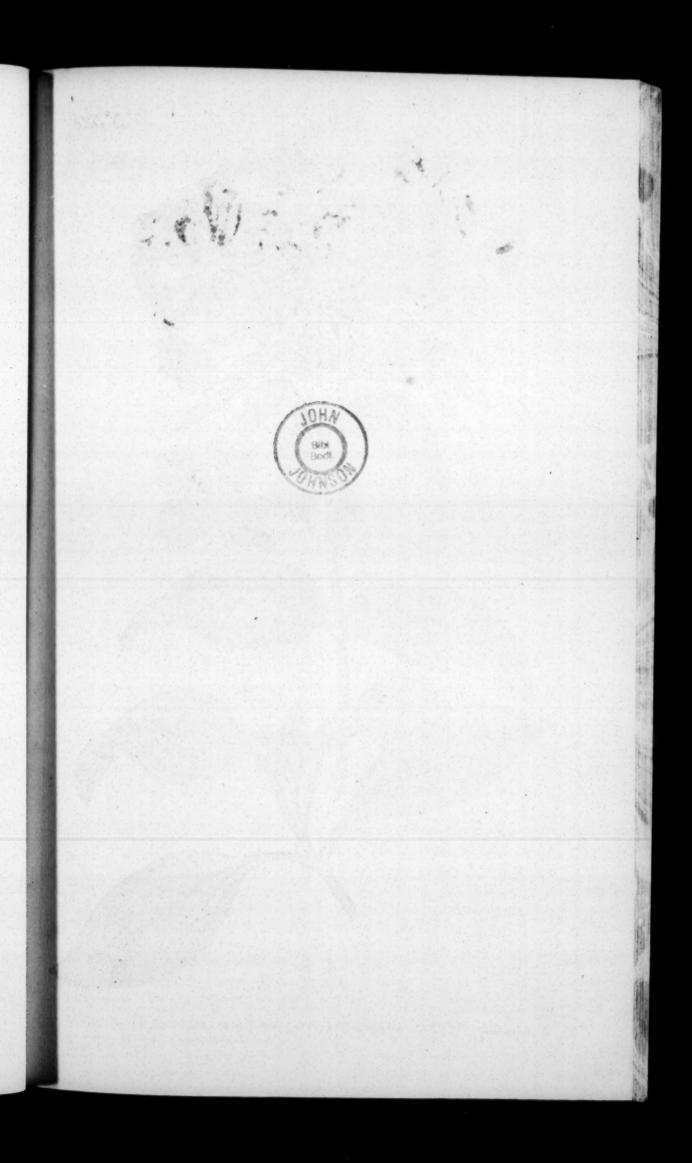
ZINNIA violacea, foliis ovato-acutis fessilibus subconnatis, palearum apicibus simbriato-serratis. Cavan. Hisp. 1. 57. t. 81. And. Bot. Rep. 1. 55.

JACQUIN having described this ZINNIA in his Collectanca, and published a figure of it in his Icones before that of CA-VANILLES, his name of ZINNIA elegans has the right of priority, and we of course adopt it.

It is a native of Mexico, and, being a tender annual, can only be raifed from feeds, which should be sown in the Spring on a hot-bed, and by the latter-end of May should be set abroad in large pots, or may be planted out in the open border, where from its size and the beauty of its slowers, it will continue to make a conspicuous sigure till destroyed by the frost.

ulp.







S' Edwards del. Pub. by W.Chirtis S'Geo: Crefient Aug 1.1801. P. Sanfon sulp

PHLOX OVATA. OVATE-LEAVED PHLOX, or LYCHNIDEA.

Class and Order.
PENTANDRIA MONOGYNIA.

Generic Character.

Cor. hypocrateriformis. Filamenta inæqualia. Stigma 3-fidum. Cal. prifinaticus. Capf. 3-locularis, 1-sperma.

Specific Character and Synonyms.

PHLOX ovata, foliis radicalibus ovatis acutis fubcarnofis, corymbis fubfaltigiatis, corollæ laciniis undulatis retufis.

PHLOX ovata, foliis ovatis, floribus folitariis. Linn. Spec. Plant. 217.?

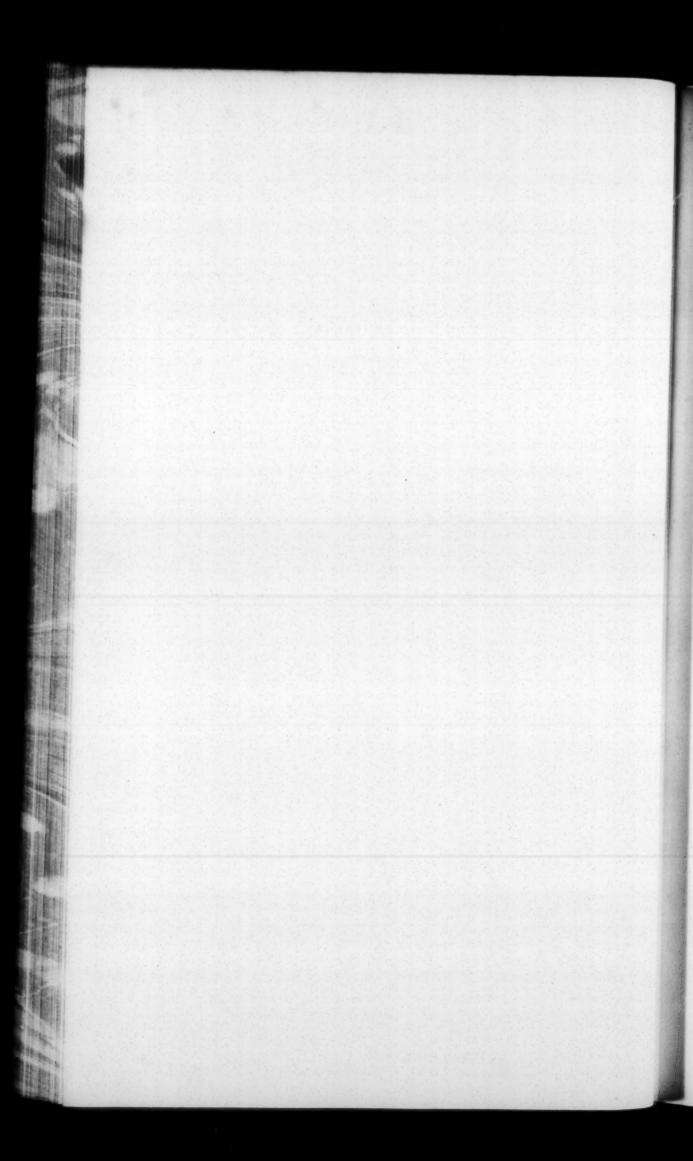
As this species has been some years known in the English gardens under the name of Phlox ovata, and corresponds with the specimen preserved under the same appellation in Sir Joseph Banks's Herbarium, we do not hesitate to continue it, at least till we shall be certain that the Linnean ovata is really a different plant, although it hardly seems probable that culture should make such a change as to convert a naturally solitary slower into so large a panicle.

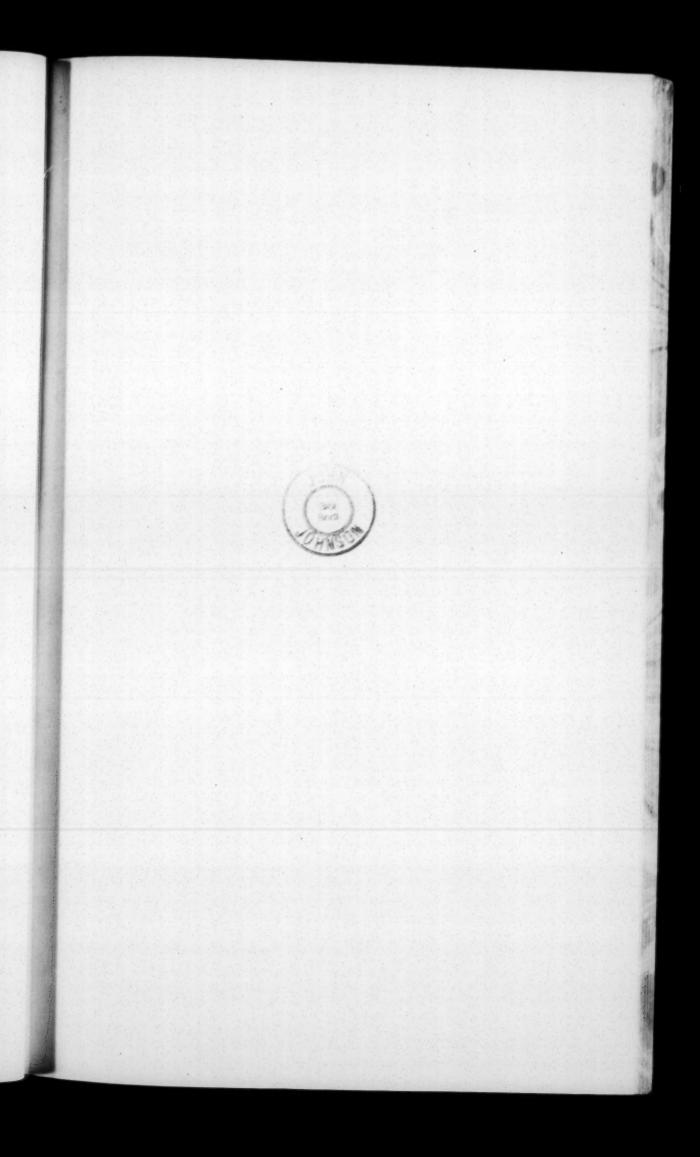
The leaves of the stalk vary very much in breadth, and are sometimes lanceolate rather than ovate, but the radical leaves, especially those of the young shoots which are pulhed out from the root after the plant has done slowering, always preserve their character. The slowers nod on their first coming out.

The whole plant is perfectly smooth.

It is a native of North-America, and, though generally confidered as a greenhouse plant, appears to be a hardy herbaceous perennial, and we observed, that when treated as such at Messrs. Whitley's and Co. where it is planted in the open border in a soil consisting chiefly of a sandy loam, it thrives better than under any other management, the roots sending forth very vigorous shoots at a considerable distance from the parent plant.

Our drawing was made some years ago from a specimen which slowered in the Botanic Garden at Brompton, since which time it is become much more common. It may be esteemed one of the handsomest of the genus; is easily propagated by parting the roots, thrives best in a fandy loam, and although sufficiently hardy to resist the cold of our ordinary winters, it may be safest to give some pots of it the shelter of a greenhouse or of a melon frame.







& Edwards del Pub by W. Curtis, S. Geo Crefcent Sep. 1 1801. F. Sanfom sculp

MELASTOMA MALABATHRICA. CINNAMON-LEAVED MELASTOMA, OF BLACK STRAWBERRY-TREE.



Class and Order.

DECANDRIA MONOGYNIA.

Generic Character.

Cal. 5-fidus campanulatus. Petal. 5-calyci inferta. Bacc. 5-locularis, calyce obvoluta.

Specific Character and Synonyms.

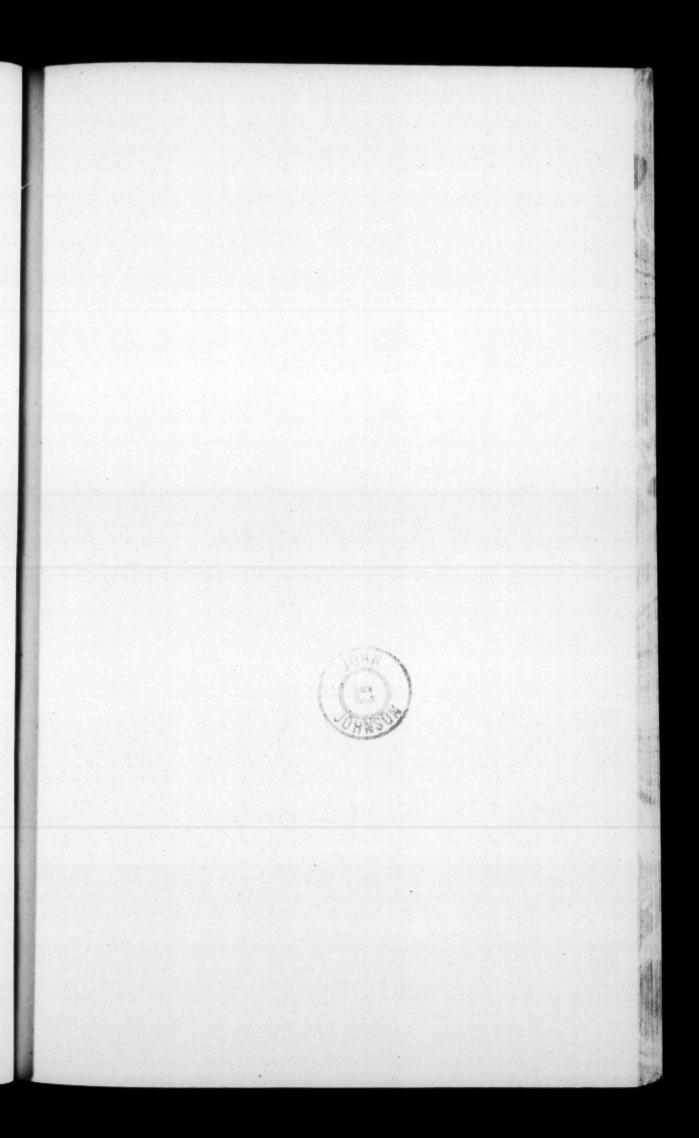
MELASTOMA malabathrica; foliis integerrimis 5-nerviis lanceolato-ovatis scabris. Spec. Plant. ed. Willdenow, 2. 592. Martin Miller's Dict. n. 10. Flor. Zeylan. 171. Burm. Zeyl. 155. t. 73. Ind. 104.

KEDALI. Rheed Malabar. 4. 87. t. 42. FRAGARIUS niger. Rumph. Amboyn. 4. p. 137. t. 72.

It is fingular, that of this very numerous genus, of which eighty-five species are enumerated by Willdenow, not one should be found in the Kew Catalogue. Several of them have been introduced of late years; but, of all that we have seen, this is the handsomest, and is otherwise interesting, as being the one from which the name of the genus was framed by Prosessor Burman. This signifies black mouth, a name given to it by the vulgar, from its effect on the mouths of the children who ate of the fruit, which is filled with a black pulp. Being a native of Ceylon and other parts of the East-Indies, it must with us, always require to be kept in a stove, where it forms a handsome shrub.

Our figure was taken from a fine plant which flowered this Summer at Mr. Alderman HIBBERT's, at Clapham-Common.

Summer at the Application





Betwards del Pub by W. Curtes S. Gov. Orgicont Sep. 1.4 1. F. Sanjem saily.

ATRAGENE ALPINA, var. AUSTRIACA.

Class and Order.

POLYANDRIA POLYGYNIA.

Generic Character.

Cal. o. Cor. duplex petalis numerosis exterioribus majoribus.

Specific Character and Synonyms.

ATRAGENE alpina; fcandens, foliis biternatis ferratis acuminatis, petalis exterioribus quaternis interioribus fpathulatis. Spec. Pl. edit. Willdenow, 2. 1285.

ATRAGENE alpina foliis duplicato-ternatis ferratis, petalis exterioribus quaternis. Spec. Pl. 764. Jacq. Austr. 1. 241.

ATRAGENE clematides. Crantz. Fasc. Q. t. 5.

ATRAGENE austriaca foliis duplicato-ternatis serratis; caule fruticoso scandente. Scop. Carn. 1. 387.

CLEMATIS alpina geranifolia. Pluk. Phyt. t. 84. f. 7. Morif. Hist. 3. s. 15. t. 2. f. ult.

CLEMATIS cruciata alpina. Ponce Bald. 335.

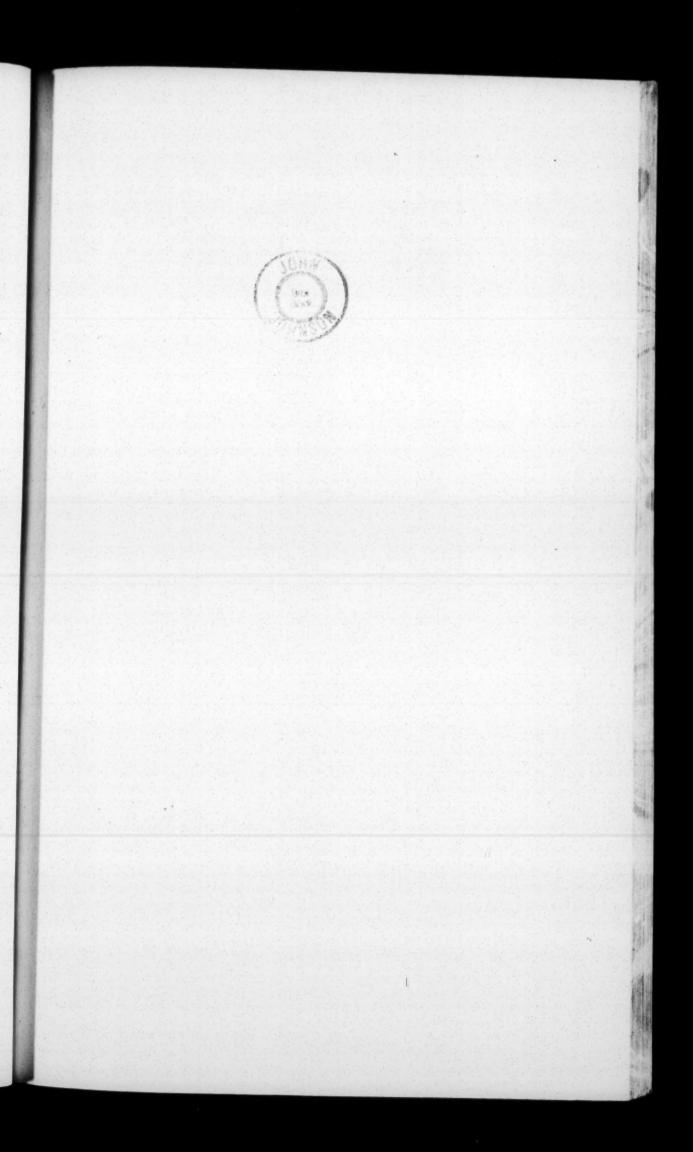
The ATRAGENE alpina from Siberia and that from Austria, if not distinct species, are certainly permanent varieties. Our plant is undoubtedly the Austrian kind, and was first introduced to this country by Mr. Loddies, Nurseryman at Hackney, who raised it from seeds sent from Crane above sourteen years ago, and in his garden it has slowered freely for several years past, as also in some others to which it has been extended. Our figure was taken this Summer from a plant in the possession of Mrs. Wright.

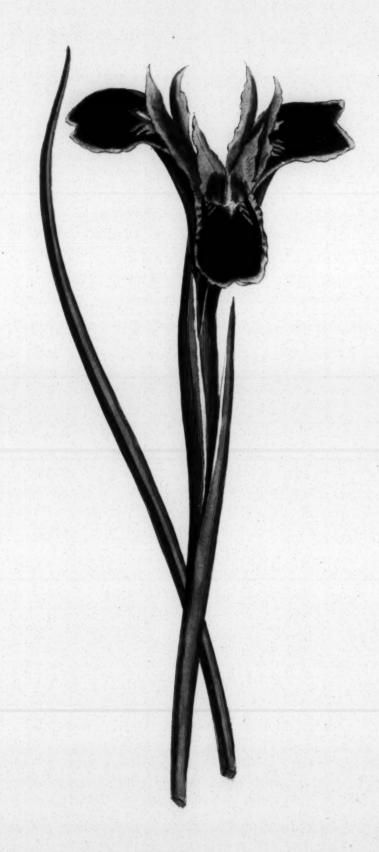
The above fynonyms appear to us to belong to this variety, although it is possible they may refer to more than one fort, as the authors do not in every respect agree.

It branches from the very bottom into feveral flender stalks feveral feet in length, which entwine round one another and whatever support comes in their way, where they are held fast by the footftalks of the leaves, which, after these decay, become woody, and continue to perform the office of claspers. The flalks are truly farmentous, the internodes being perfectly naked. At equal distances of about four inches, the leaves and flowers fpring from the fame bud. These gemmæ are generally opposite, consist of several imbricated persistent squamæ, the centre ones larger, membranous, and of a brown colour. It may be considered as an involucrum, from the bosom of which grow usually two petioles and a peduncle bearing a folitary nodding flower. The petioles are an inch and half long, smooth, or, if examined with a lens, flightly pubescent, and divide into three branches, of which the centre one is the longest, each bearing a ternate leaf. The leaslets, as in most of the genus, are subject to vary confiderably in shape, but in general the three terminal ones are distinct, ovate, acute, and more or less deeply ferrated, the lateral leaslets frequently run all three into one; all are fmooth, but veiny on the under fide. The pedancle is longer than the leaves and ftraight, bearing the flower nodding and the feeds erect. In the axillaof the petioles the new gemmæ are formed. By this arrangement, and the perfiftent petioles, the old knots become very large and intricate. The outer corolla confifts of four large petals of a fine blue colour with a white edge, are ovate, acute, and covered on the outfide, especially at the margins, with a fine down. The inner petals are in fact nothing more than enlarged barren filaments; and therefore the separation of this genus from CLEMATIS, appears to us, in this instance at least, to be neither natural nor necessary. The plume of the feed is a bushy tail of long white hairs, but is neither secund, as represented in Jacquin's figure, nor diffich, as described by WILLDENOW.

It is propagated by feeds only, at least the experienced cultivator who introduced it, has not yet been able to succeed by any other mode. Is perfectly hardy, bearing the severest

frosts of our climate without injury.





S. Edwards del Pub by W. Curtis, S. Geo. Crefcenc Sep. 1. 1801. E. Sanfom sadp

IRIS TUBEROSA. SNAKE'S-HEAD IRIS, OF VELVET FLOWER-DE-LUCE.

Class and Order.

TRIANDRIA MONOGYNIA.

Generic Character.

Cor. 6-partita: laciniis alternis reflexis. Stigmata petali-

Specific Character and Synonyms.

IRIS tuberosa; imberbis foliis tetragonis. Thunh. Diss. n. 43. Spec. Plant. edit. Willdenow, 1. 240. Martin Miller's Dist. n. 47. Swert Floril. t. 36.

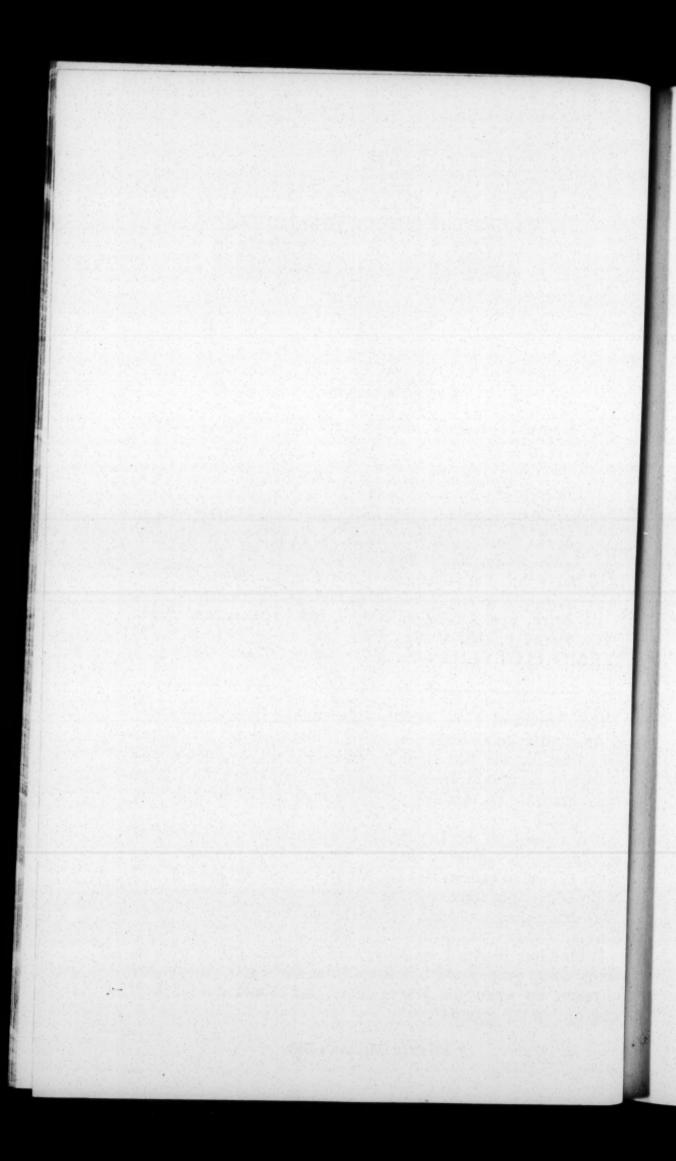
IRIS tuberofa, folio anguloso. Bauh. Pin. 40. Morif. Hist. 2. p. 348. s. 4. t. 5. f. 1. Lobel. Hist. 51. figura melior. Dod. Stirp. 249. fig. eadem. Gerard. emac. 103. eadem. Park. Parad. p. 188. t. 185. f. 6.

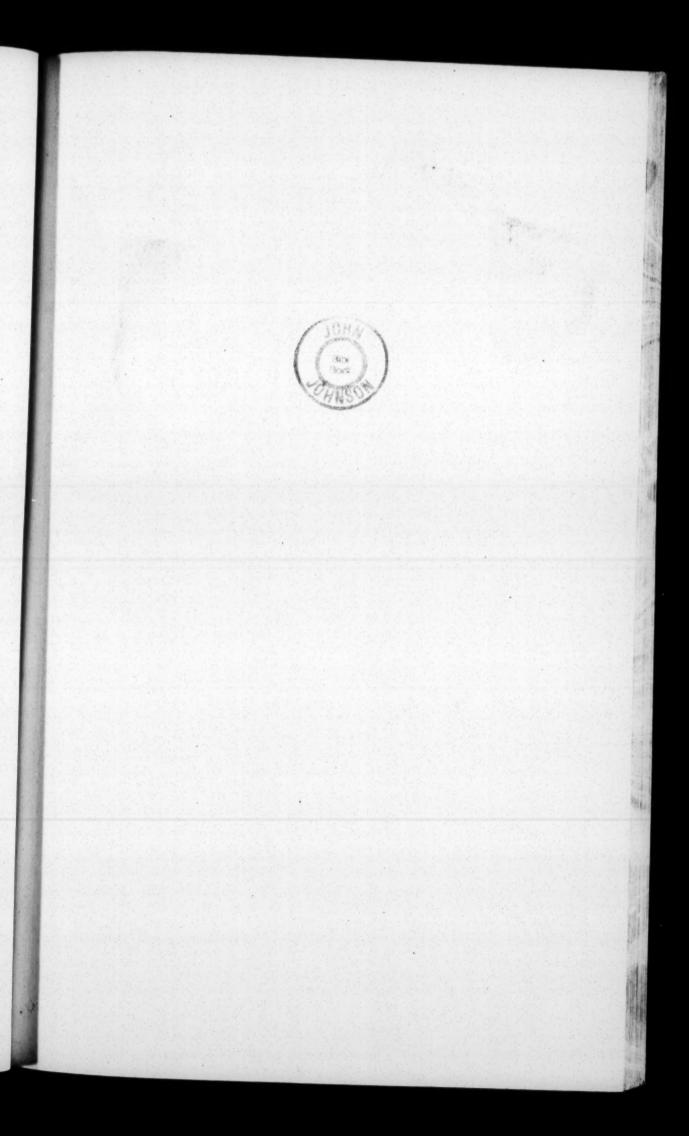
HERMODACTYLUS folio quadrangulo. Tourn. Cor. 50.

This species of IRIS, readily distinguished from every other by its quadrangular leaves, is more remarkable for the singularity than for the beauty of its flowers; yet, to some minds not apt to be caught by gaudy attire, these some tints have their charms. In this respect it strongly contrasts with our next figure.

It is a native of the Levant, and with respect to the cold of our climate is perfectly hardy, slowers best, according to MILLER, in an eastern aspect, and if the soil be light it will be proper to put some rubbish at the bottom to prevent the roots descending too deep, in which case they seldom produce slowers.

It bloffoms in April or May, rarely produces feed with us, but is easily propagated by offsets from the roots, which may be taken up when the leaves decay, but should not be kept long out of the ground*.







[532]

FERRARIA TIGRIDIA. MEXICAN FERRARIA, or TIGER-FLOWER.

Class and Order.

MONADELPHIA TRIANDRIA.

Generic Character.

Spatha 2-phylla. Cal. o. Petala 6. 3-externis latioribus. Stylus 1. Capf. 3-loculari infera.

Specific Character and Synonyms.

FERRARIA Tigridia; foliis plicatis, corollis lato-urceolatis: laciniis interioribus depresso-intersectis.

FERRARIA pavonia; caule simplici slexuoso, foliis equitantibus ensisormibus nervosis, petalis planis: interioribus duplo brevioribus pandurisormibus. Spec. Pl. edit. Willdenow, v. 3. p. 581.

FERRARIA pavonia. Linn. Suppl. 407. Cav. Diff. p. 343.
1. 189. Larmarck Encyclop. v. 2. p. 453. 2.

TIGRIDIA Juffieu. Gen. p. 57.

MORÆA pavonia. Thunb. Moræa, 14, 20.

OCOLOXOCHITL seu siore tigris. Hern. nov. Pl. Amer. Hist. tab. 276. Gerard. emac. 122. 2. Encyclop. Brit. t. 350.

TIGRIDIS flos an Dracunculi species? Lob. Obs. 59. Icon.
111. Dod. pempt. 3. p. 421. Swertii Floril. 2.
t. 31. fig. 2. J. Baub. 2. p. 684. Raii Hist.
1165. J. Theod. de Bry, Florileg. nov. t. 111.

Of all the above authors, no one had feen the living plant except Hernandez, who was fent to Mexico as a Physician, by Philip II. King of Spain; and his figure, though only a small wooden cut, is more botanically correct than any of the others, not excepting that of CAVANILLES. We are informed

by him that it grew wild about Mexico, and was much cultivated for its excessive beauty and for the medicinal virtues of its root; being, as he terms it, " a frigefacient in fevers, and " also a promoter of fecundity in women." Both HERNANDEZ and M. DE BRANCION, from whom LOBEL derived his knowledge of the plant, observe that the root is esculent. All the other old authors appear to have borrowed what they have faid from these two sources, except perhaps DE BRY, who fays he received it (probably meaning the drawing) from CASPAR BAUHIN. The author of this figure, though it was published before the Rome edition of the Mexican history, appears to have had access to the drawing of HERNANDEZ, as the form of he flower is the fame, only four roots are crowded together. The more modern authors feem to have made their descriptions and figures from no other authority except a dried specimen in the possession of Jussieu. That of Mutis, cited by the younger Linnaus, we have not feen, and has not, we believe, been as yet published.

For the pollession of this superb flower, this country, and perhaps Europe, is indebted to Ellis Hodgson, Esq. of Everton, near Liverpool, with whom it flowered and produced ripe seeds about five years ago. From this gentleman, seeds were communicated to Messrs. Grimwood and Wykes, and by them it has been dispersed among other Nurserymen. There is little fear but that it will soon become very common, as it slowers freely, produces seeds in abundance, and may be likewise increased by offsets from the roots. It has no scent, but in splendid beauty it appears to us, at least when affisted by rarity and singularity, to surpass every competitor; we lament that this too affords our fair countrywomen another lesson, how extremely sugacious is this loveliness of form; born to display its glory but for a few hours, it literally

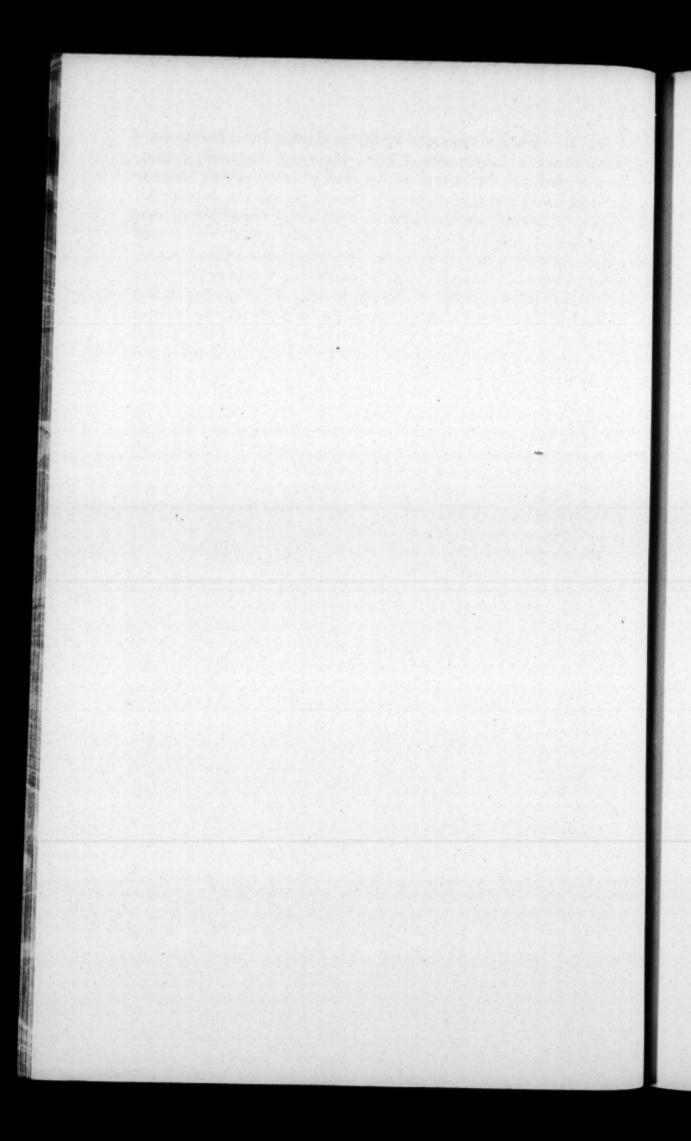
melts away.

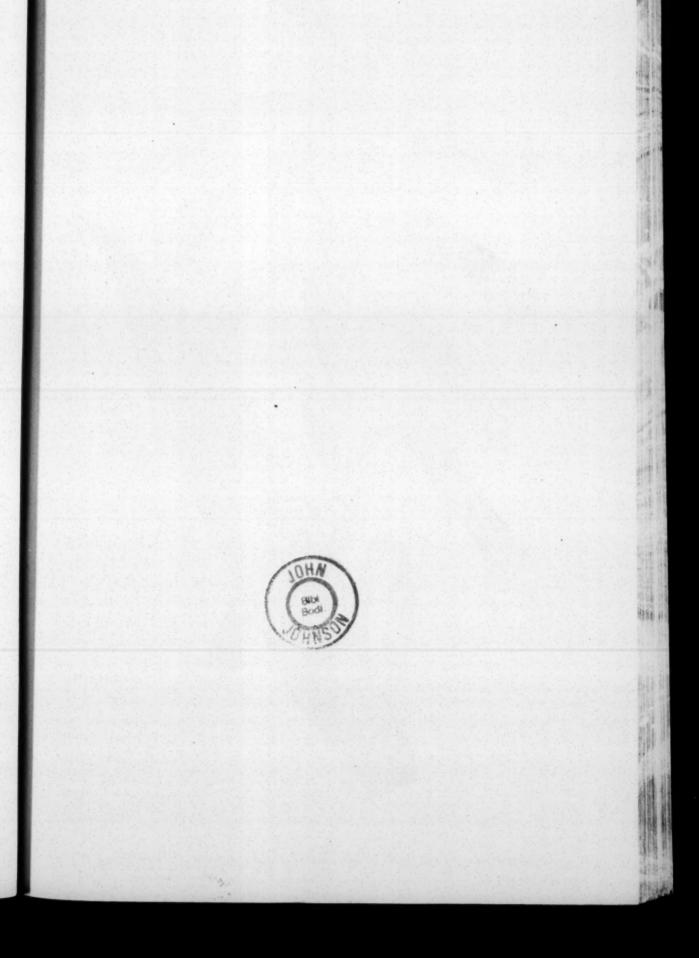
By the alteration made by WILLDENOW in the generic character of Ferraria, this may be included; but the trivial name of pavonia, injudiciously adopted from a supposed refemblance to the Iris pavonia, figured by Jacquin (not the Iris pavonia of the Botanical Magazine) is totally inadmissible, the colours being in no respect similar to those of the peacock; we have, therefore, as nearly as could be done in one word, restored the original name. We have an additional motive to do so from the consideration, that should it be hereaster thought necessary to make it a distinct genus from Ferraria, the name of Tigridia, already applied by Jussieu, would undoubtedly be given it.

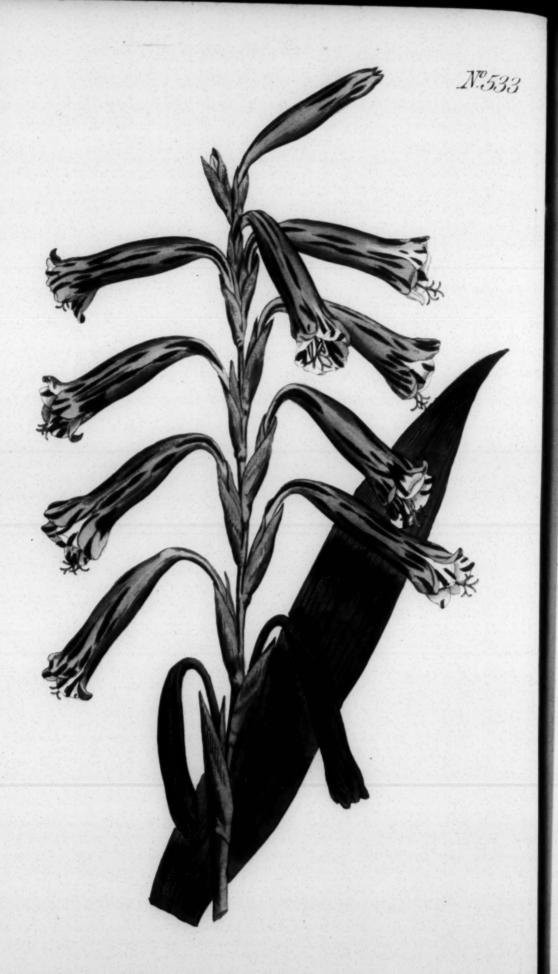
Desc. Root, a tunicated bulb, producing from one to four flems about a foot and half high, somewhat flexuose, round, jointed, fmooth, bearing at each joint a plicated oblong-lanceolate leaf from a sheathing petiole the length of the internode. and at the fummit an involucrum, apparently confifting of two lanceolate, ancipital, conduplicate, nearly equal valves, of which the exterior is in fact the common spathe or involucre, and embraces the interior with its contents; the interior valve. which is exactly opposed to the outer one, is the proper spathe of the first flower and embraces it, together with the spathes and flowers that are to come in fuccession; the spathe of the second flower is opposed to that of the first, and placed between it and the pedicel of the first flower; and so of the rest, every spathe being opposed to the one of the preceding flower and embraced by it. These spathes are similar in shape, but diminish progreffively and become more membranaceous. broad-urceolate (but this could not be expressed by the drawing in a front-view of the flower) divided into fix fegments, of which the three outer are urceolate at the base, expanded above, and reflected at the point; the three inner ones smaller by half, biformed, fingularly divided into a lower haftate and an upper ovate division by a depressed intersection; the upper division is of the richest scarlet imaginable, variegated by a bright golden yellow. Filament, a cuniculated or piped triquetral column. Anthers, leffile, erect, bearing their pollen on the outfide, conniving at the point, diverging below to admit the exit of the fligmas. Germen, obtulely trigonal, three-celled. Style, the length of the filamental column, through the hollow of which it passes. Stigmas, three, filiform, bisid. Capfule, oblong, obtufely trigonal, three-celled. Seeds, in double rows in each cell and

It is a native of Mexico and Peru, is properly a greenhouse plant, and succeeds best in light mould. Seedlings will slower the second year. It is best to take up the bulbs the latterend of September or October, and to keep them out of the ground till the Spring*.

^{*} In every part of this paper, we have been very much affiled by the liberal communications of John Lellenden Gawler, Efq.







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WATSONIA ALETROIDES. ALETRIS-LIKE WATSONIA.

TRIANDRIA MONOGYNIA.

Generic Character.

Spatha adpressa. Corollæ tubus gracilis: saux cyathiformicylindrica: limbus sexpartitus subæqualis vel æqualis. Filamenta tubo adnata à fauce libera. Stigm. 3. gracilia bisida. Caps. rigido-coriacea. Sem. oblongiuscula plurima. Gazvler inedit.

Specific Character and Synonyms.

WATSONIA aletroides; corollis subcernuis: tubo spatham subæquante: sauce limbi laciniis brevibus ovatis æqualibus sere quadruplo longiore. G.

ANTHOLYZA alethroides, Burman. Flor. Cap. Prod. 1. Houtt. Linn. Pfl. Syft. 11. 77.

GLADIOLUS tubulosus. Jacq. Ic. rar. 2. 229 Coll. 4. 153. GLADIOLUS merianus. Thunb. Diff. de Glad. p. 14. n. 12.

Prod. 7.
ANTHOLYZA merianella. Ait. Kew. 1. p. 67. Curtis's Bot.

Mag. 441.
ANTHOLYZA tubulofa, varietas flore variegato. Andrewes's
Bot. Repos. 174.

The name of Watsonia was first given by MILLER, in honour of our friend, the late Sir WILLIAM WATSON, and was adopted by Jussieu in that invaluable work his Genera plantarum, and will be found to form a very natural genus, fufficiently distinct from Antholyza. This very elegant species, which does not appear to have been noticed by WILLDENOW, is readily diffinguished from every other by the diffinct form of the corolla, which strongly resembles some species of Aletris, Lachenalia, and Aloe. The alternate fegments are interior; the bulb is compreffed and tunicated. It is very subject to vary, having in one instance a fingle scape fix or eight inches high, with three or four distant, sometimes one-ranked, slowers; in another, a three or four-branched stem two feet high, with a terminal spike of from twenty to thirty closely imbricated distich flowers, and adpressed spikelets in proportion. The same bulb will one year produce pale pink, the next deep crimfon, and the following variegated or ftriped corollas, as in the figure, always scentless. One of these varieties has been already figured in the Botanical Magazine, under the name of Antholyza merianella, vid. pl. 441. but the real Antholyza merianella of Linneus, or Gladiolus merianellus of Thunberg, is a different plant, having pubefcent leaves, fewer in number, nearly sheathing the whole stem, slowers differently formed, with larger and rounder segments, stigmas entire and complicate; and is in fact a Gladiolus nearly allied to Gladiolus birsutus by leaf, and to Gladiolus Walsonius by the tubular throat.

As there is a specimen of our plant preserved in Sir Joseph BANKS'S Herbarium from Kew-Garden, under the name of ANTHOLYZA merianella, it is not improbable that this circumstance led Mr. Curris into an error, which is no difparagement to his judgment; for fuch is the confusion prevailing with respect to these plants, that the most learned Botanists acknowledge their inability to determine many of This confusion has partly arisen from the difficulty of the subject itself, owing to the great number of new species that have been introduced, which were unknown to LINNAUS or described by him from dried specimens only, and to the proneness of these plants to vary; but more especially from the carelessness of authors, quoting false synonyms, in the first instance, and heaping blunder upon blunder by copying each other's errors, without fufficiently ferutinizing the descriptions. The fear of adding to this confusion has frequently deterred us from prefenting our readers with more of this beautiful tribe, and but for the affistance of Mr. GAWLER, who with infinite labour and skill, has been able to make out all LINNAUS'S and even Thunberg's species, we should have been tempted to have paffed them by in despair.

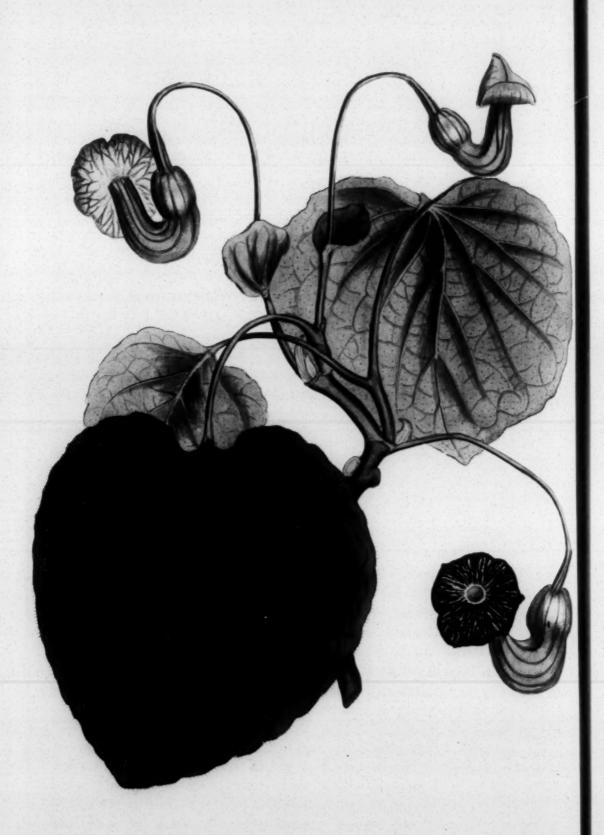
The description of THUNBERG above quoted is excellent when applied to our plant, but how he came to mistake it for LINNEUS'S ANTHOLYZA meriana is not for us to unravel. JACQUIN has given a good figure of one of the varieties, but has erroneously described it as having a three-valved spathe; had he known that it had been already described by BURMAN, he would of course have adopted his name of aletroides, which possessing the right of priority, as well as being more descrip-

tive, we consider it a mere act of justice to restore.

Our figure was taken this Summer from a plant which flowered at Meffrs. Grimwood and Wykes's, Kenfington. It is of much later introduction than the date affigned to Antholyza merianella in Hort. Kew. which rested upon the supposition of its being the same with Watsonia bumilis of Miller, which it is not. The specimen above mentioned in Sir Joseph Banks's Herbarium bears the date of 1778, which may perhaps be considered as nearly that of its first introduction into this country.



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ARISTOLOCHIA SIPHO. BROAD-LEAVED BIRTHWORT.

Class and Order.

GYNANDRIA HENANDRIA.

Generic Character.

Hexagyna. Cal. o. Cor. 1-petala, lingulata, integra. Capf. 6-locularis infera.

Specific Character and Synonyms.

ARISTOLOCHIA Sipho; foliis cordatis petiolatis, floribus folitariis: limbo trifido æquali, bractea ovata, caule volubili frutescente. Ait. Kew. 3. 311. L'Herit. Stirp. nov. p. 13. t. 7. Martin's Mill. Diet. a. 11.

This tree, being a native of North-America, is perfectly hardy, and will grow to a very great height if properly supported; but, as a climber, is not able to support itself. The large cordate leaves, which are of a fine dark green, make a very handsome appearance, and if the branches were trained over an arbour or trellis-work, for which purpose the plant seems peculiarly adapted, would form a canopy impenetrable to the rays of the sun, or moderate rain.

The finest tree of this fort we remember to have seen, is in the garden of the late Dr. PITCAIRN, at Islington, now in the possession of Mr. Wilson, where it is planted against the front of the greenhouse, to the top of which it ascends, and clothes the pier from bottom to top in a very beautiful manner. The slowers are curiously formed, but, being concealed below the leaves, are not conspicuous. The root and bark have an aromatic slavour. It was first sent over to this country by Mr. John Bartram, of Philadelphia,

about the year 1763*.

It rarely ripens its feeds with us, but may be propagated by fuckers.

Our figure was drawn from a tree which flowered with Mr. WILLIS, at Battersea-Rise, in June last.



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VIOLA PALMATA. PALMATED VIOLET.

Class and Order.

PENTANDRIA MONOGYNIA. Willd.
SYNGENESIA MONOGAMIA. Linn.

Generic Character.

Cal. 5-phyllus. Cor. 5-petala irregularis poslice cornuta. Antheræ cohærentes. Caps. supera 3-valvis 1-locularis.

Specific Character and Synonyms.

VIOLA palmata; acaulis, foliis palmatis quinquelobis dentatis indivififque. Gron. Virg. 135. Spec. Plant. edit. Willd. 1. p. 1159. Ait. Kew. 3. 286.

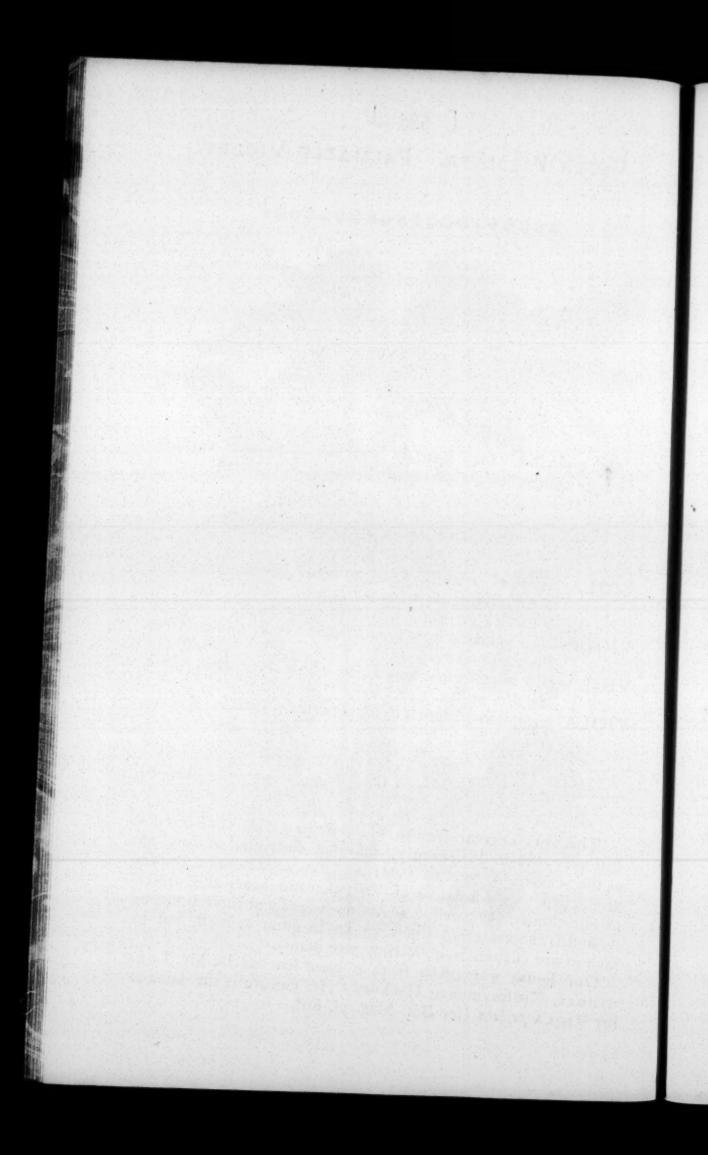
VIOLA foliis palmatis finuatis, stolonum reniformibus. Gron. Virg. 1. p. 182.

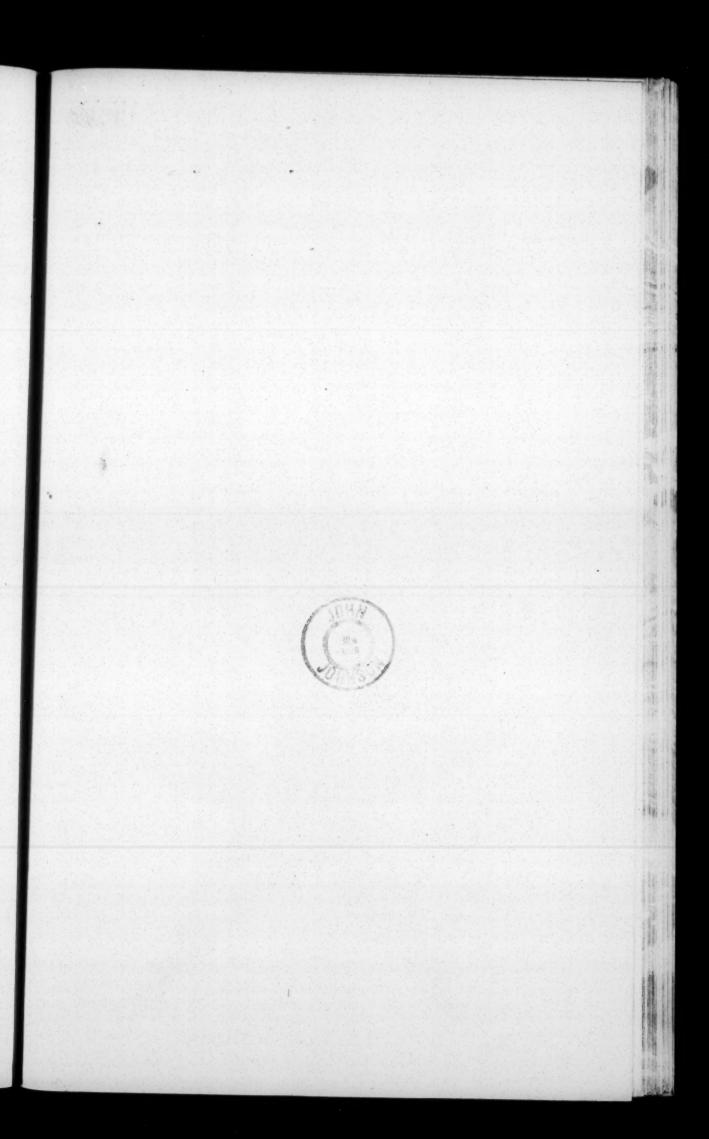
VIOLA alba foliis fecuris amazoniæ effigie Floridana. Pluk. Amalth. 208. t. 447. f. 9.

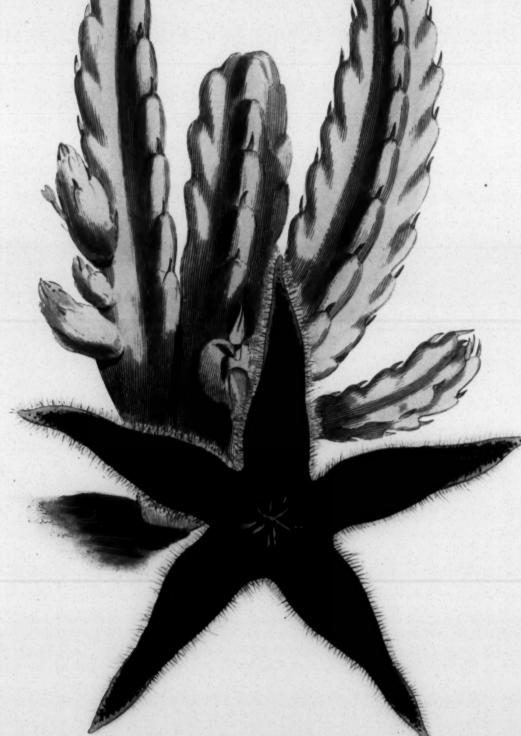
VIOLA virginiana platani fere foliis parvis et incanis. Ejusdem Mant. 187.

This very fingular species of Violet may be considered as still very rare in this country, although cultivated so long ago as the year 1739, by PHIL. MILLER, in the Botanic Garden at Chelsea. It is a native of Virginia, and bears the winters of our climate very well. It has no sweet scent to recommend it, and is therefore not likely to be in great request, but by such as are curious in collecting rare plants.

Our figure was taken from a plant fent us by Mr. Lod-DIDGES, Nurseryman at Hackney. Its culture is the same as for VIOLA pedata (see Bot. Mag. pl. 89).







T. W. Bernstonder

Pub by W. Curtis & Geo : Crefcent Oct 1.1801.

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STAPELIA ASTERIAS. STAR-FISH STAPELIA.

Class and Order.

PENTANDRIA DIGYNIA.

Generic Charaeler.

Contorta. Nedarium duplici stellula tegente genitalia.

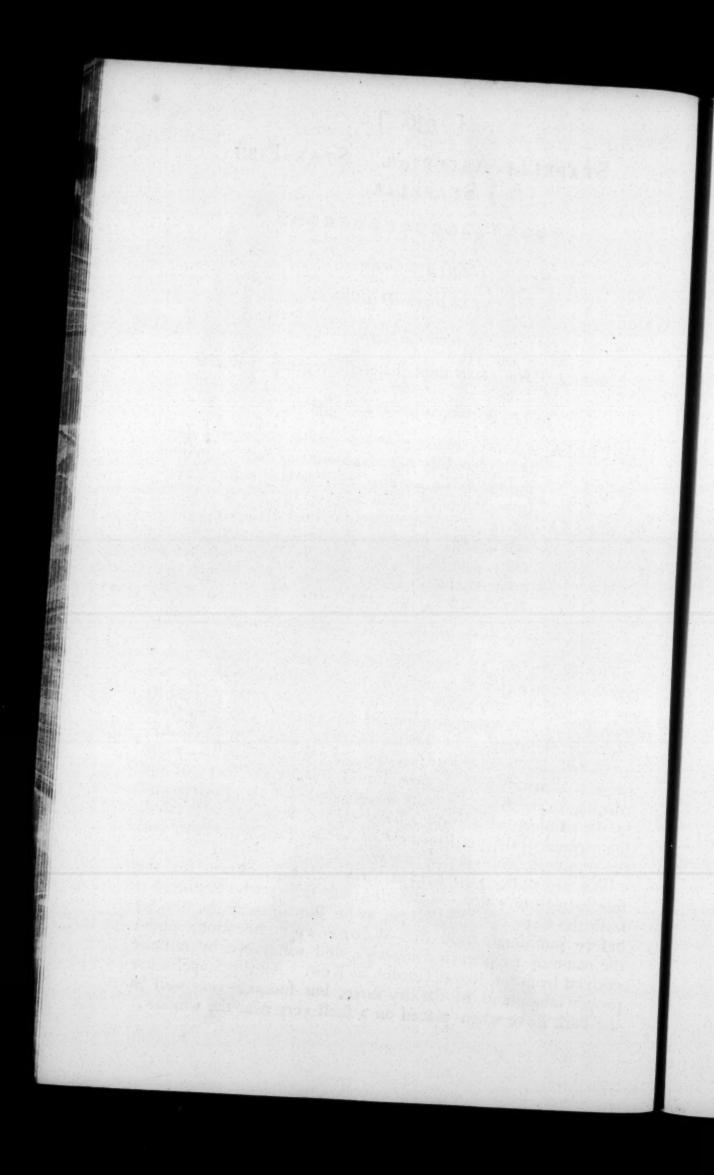
Specific Character and Synonyms.

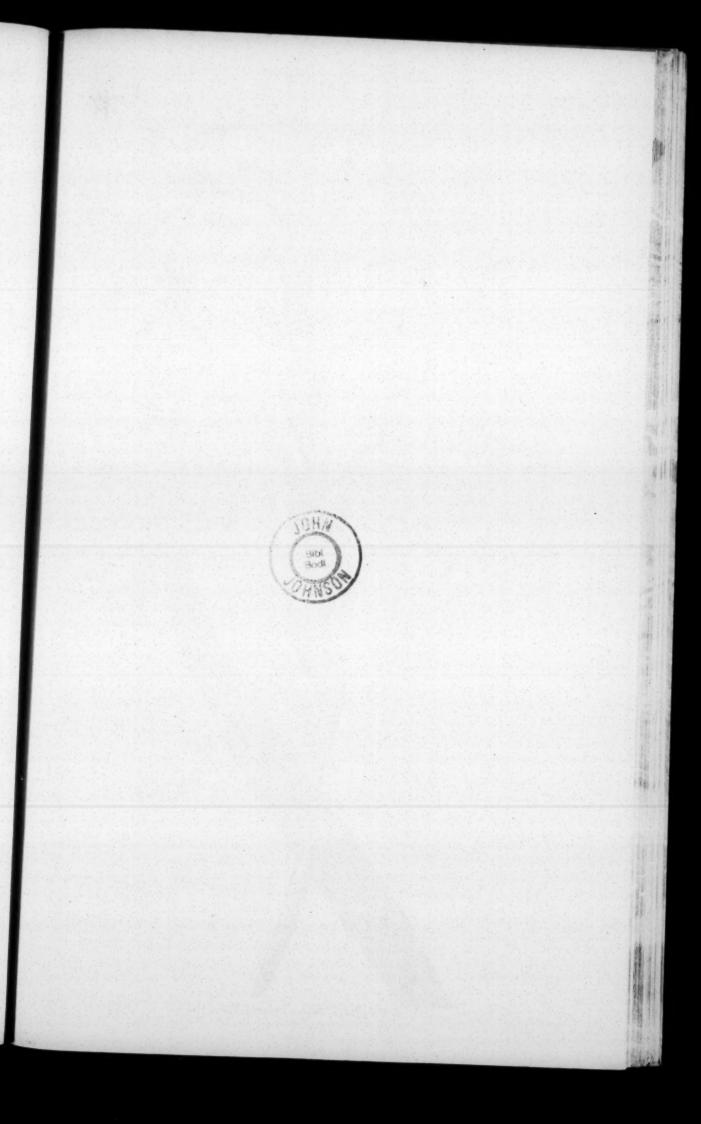
STAPELIA Asterias; ramis pluribus erectis tetragonis dentatis, dentibus brevibus erectis, corolla magna quinquesida; laciniis lanceolatis margine revolutis ciliatis. Masson. Stap. n. 14. t. 14.

STAPELIA Asterias; corollis quinquesidis: laciniis ovatoacuminatis, margine revolutis, villosis, pedunculis longitudine corollæ, ramis erectis tetragonis attenuatis basi sloriseris. Spec. Plant. edit. Willdenow, 1. p. 1280.

The flower of this very distinct species of Stapelia has a highly offensive smell, appearing to us, although we are not certain that the eye might not impose on the imagination, to approach to the stink of a putrid star-sish, as well as to refemble it in form. The specific character given by Willbenow is not so accurate as that of Masson. In many respects it agrees with hirsuta, but differs in the shape of the corolla, in the want of hairs in the centre of the flower, and in the colours, which, though nearly the same, are reversed, the ground of the petal in the hirsuta being a pale yellow, and the transverse veins a dull purple.

We are obliged to Mr. Loddices, of Hackney, for the specimen from which our drawing was made, who imported it from the Cape of Good Hope, as he did likewise the one we before published, from Mr. Woodford's collection, under the name of Stapelia lentiginosa, and which we by mistake derived from the Royal Garden at Kew. All the Stapeliæ are proper inhabitants of the dry stove, but succeed very well in the bark stove when placed on a shelf very near the window.







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WATSONIA ROSEO-ALBA. LONG-TUBED WATSONIA.



Class and Order.

TRIANDRIA MONOGYNIA.

Generic Character.

Spatha adpressa. Corolla recurva: tubus fauce cyathiformicylindrica gracilior, limbus sexpartitus subæqualis vel æqualis. Filam. tubo adnata à fauce libera. Stigmata 3, gracilia, bisida. Capsula rigido-coriacea. Sem. plurima oblongiuscula. Gawler.

Obs. Ex alis foliorum sapissime bulbifera. Radix tuber sibroso-tunicatum. Scapus strictissimus, nec raro subligneus. Folia ensisormia, utrinque attenuata, glabra, sape lucida. Spathæ sur sum sphacelatæ et sapissime coloratæ. Faux limbo modo pluries brevior, modo pluries longior, modo æqualis. Limbi laciniæ regulari-patentes vel subbilabiato-patentes, latitudine æquales vel paulo inæquales, longitudine semper æquales. Capsula ex trigono cylindrica, utrinque attenuata, coriacea, rigida. Seminis integumentum nucleo multo majus, albescens, opacum, in marginem inæqualem compressum. Semina haud raro Pini sylvestris semina aliquantulo referentia. Gawler.

In speciebus quibus faux brevissima margo seminis obsoleta, nucleus quam

in Gladiolo major. G.

Specific Character and Synonyms.

WATSONIA rosco-alba; corolla regulari: tubo spatha fauce limbove duplo longiore: laciniis æqualibus explanatis acuminatis, antheris faucem æquantibus. G.

GLADIOLUS roseo-albus. Hort. Schoenb. 1. p. 7. t. 13.

The leaves of this species are linear-ensiform, smooth, shorter than the stem, and somewhat twisted at the base. Scape rather slexuose, with two or three ancipital spathe-like leaves and, as far as we have hitherto seen, simple; but, as Mr. GAWLER observes

observes that all the plants of this order which have spathaceous cauline leaves are subject to branch, it may probably be sometimes polystachious. Spathes green, sphacelate towards the point, keeled, and much shorter than the tube. Corolla about three inches long. Tube twice as long as the throat, into which it gradually widens, and is joined by a geniculate curvature. Segments horizontally spreading, equal, acuminate, as long as the throat, margins of the alternate ones slightly revolute. Stamens closely accumbent, equal to the throat. Anthers deep blue. Style projecting nearly equal to the segments. The bulb is smaller than in many of its congeners and roundish.

The length of the tube, relative to the faux, is the permanent specific distinction; for although JACQUIN describes the segments, tube, and saux, as of equal length, his own sigure shaving a double tube, it may not be amiss to mention here, that, in Mr. GAWLER'S descriptions, that part only to which the filaments are joined, is called tube, where these become free the saux begins, and extends to the base of the segments

of the limb.

Our figure was drawn last July from a plant at Messers. Grimwood and Wykes's, who imported it some time since from the Cape. Mr. Alderman Hibbert possesses a variety with deep purple slowers, but with the mouth always of a deeper colour in the inside.

All the WATSONIAS flower late in the Summer, or in

Autumn.

Besides the WATSONIA aletroides and rosco-alba, the sollowing list, with others not yet described, will rank under this genus, as above defined:

IXIA marginata. Ait. Kew.

GLADIOLUS iridifolius. Willd. but not his synonym of GLA-DIOLUS cardinalis. Schneeve.

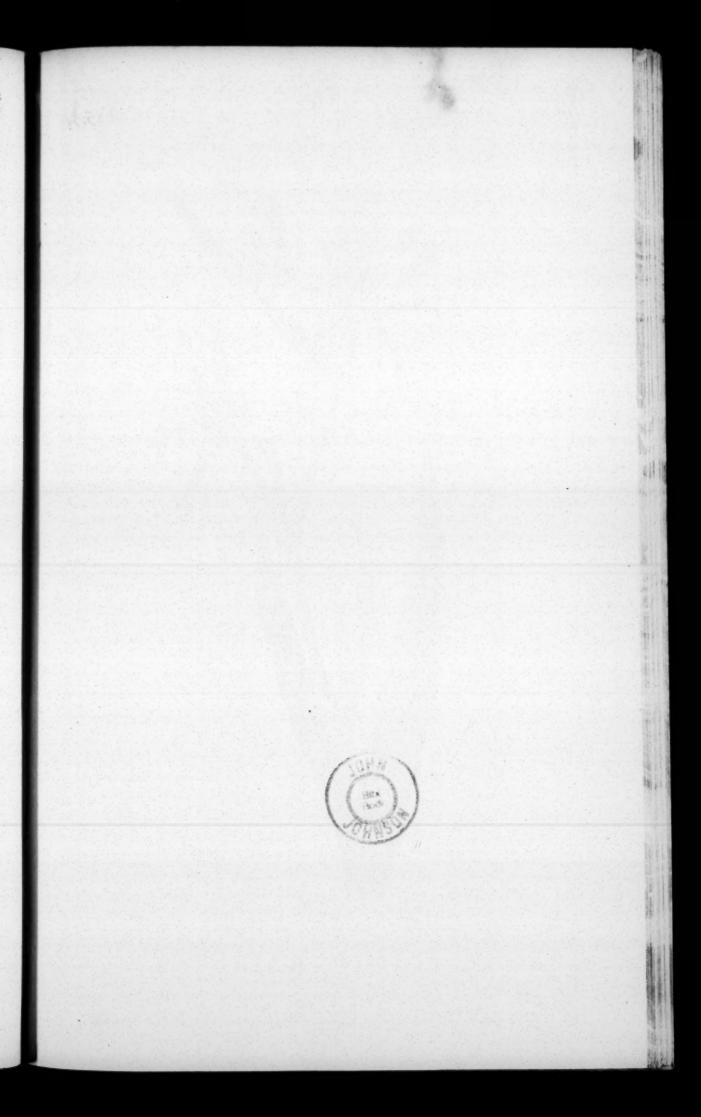
GLADIOLI iridifolii varietas. Jacq. Ic. rar.

GLADIOLUS laccatus. Id.

ANTHOLYZA meriana. Linn.

ANTHOLYZE merianæ varietas.

WATSONIA bumilis. Miller.





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GLADIOLUS UNDULATUS, var. B. WAVED-FLOWERED GLADIOLUS, OF CORN-FLAG.

Class and Order.

TRIANDRIA MONOGYNIA.

Generic Character.

Spathæ valvula exterior lanceolata, concava, integerrima. Cor tubulofa: limbus 6 partitus. Stamina adfeendentia: antheræ parallelæ. Stigmata 3, furfum dilatata, complicata, demum canaliculato-explicata. Capfula ovata, oblonga, fubtrigona, lenta. Sem. numerofa. Gawler inedit.

Obs. Radix tuber sibroso-tunicatum subrotundum. Fosia multimodis ensisormia. Scapus laxulus, teres, modo triqueter et alatus. Tubus sili-sormis cylindricus, modo brevissimus, modo longior, vel etiam in saucem cylindricam productus. Limbus sapissime inaequalis, modo subaqualis, raro aqualis, infundibulisormi—vel campanulato—vel divaricato-ringens, rarius hypocraterisormi-regularis. Capsula ovato-oblonga, obsolete triquetra membranaeca, tenuissima. Seminis integumentum exterius maximum, membranaecam, tenue, pellacidum, spadiceum, in marginem subaqualem latissimam compresso-ampliatam. Nucleus parvus, subrotundus. G.

In GLAD. communi (nec in G. byzantino etsi pro varietate habito) femina pauciora, nucleus major integumentum implens, margo obsoleta. In

GLAD. Cunonia scapus strictus, crassus, tuber nudum. G.

Specific Character and Synonyms.

GLADIOLUS undulatus; corolla erecta infundibuliformi: laciniis undulatis obtufis, fuperioribus ovato-oblongis, fumma majore: inferioribus duplo minoribus æqualibus fubrecurvis. Gawler.

GLADIOLUS augustus (angustus?). Thunh. Diff. 19. 21.

prod. 8.

(a) GLADIOLUS undulatus. Jacq. coll. 256. Ic. rar. t. 251. Willd. Sp. Pl. v. 1 p. 218. Nec Linnæi.

GLADIOLUS friatus. Andr. Bot. Rep. 91. ejusque Recens.
Gladiolus undulatus.

(β) GLADIOLUS undulatus, corolla roseo-alba, lucida: laciniis infimis sascia atrosanguinea percursis. G.

GLADIOLUS, foliis ensiformibus sloribus alternis patentibus.

Mill. ic. 198. t. 292. f. 2.

GLADIOLUS undulatus, Schneev. & Geuns. Ic. 19.

This beautiful GLADIOLUS is without fcent. Stem from eight inches to a foot high, fometimes fimple, fometimes branched.

branched. Outer leaf longest, subfalcate, strongly nerved.

The tube shorter, equal to, or longer than the spathe.

This is not the GLADIOLUS undulatus of LINNAUS, as any one may be fatisfied who will attend to the observations on this and GLADIOLUS recurvus in the Mantissa, where the tube is described to be filiform, lax, and pendulous; the fegments of the corolla fomewhat equal and acuminate; the stem a foot and half high. This description, which, by no means applies to our plant, corresponds very well with GLADIOLUS cuspidatus of JACQUIN, the fegments of which are also more decidedly and constantly undulated. However, as it has been already three times figured, and is known to Botanists in general by the present title, which agrees well enough with it, as does the name of cuspidatus with the real undulatus, we retain it, as most likely to prevent confusion. GLADIOLUS undulatus of LOUREIRO Cochin, 36. having a "four-parted laciniate nec-" tary," can scarcely be of this genus, although made a variety of LINNAUS'S plant by him and Professor MARTIN. MILLER received a bulb of our plant from the Gardener VANHAZEN of Leyden, who had raised it from Cape seeds. For its culture, fee 539.

The generic effential character above given will be found to contain a very natural family, excluding none of the species already known, but such as will rank under Watsonia, Antholyza, Babiana*, or one or other of the subdivisions of Ixia, excepting only Gladiolus gramineus, which is a completely

distinct genus.

The following are the species already described, and many others are to be met with in our gardens:

GLADIOLUS watsonius; abbreviatus, And. Bot. rep. 166.—
tristis; versicolor;—gracilis; byalinus; carinatus;—
brevisolius; slexuosus;—merianellus; birsutus;—communis;
byzantinus, Miller: cardinalis, Schneev. Curtis:—floribundus;
undulatus; angustus;—blandus (albidus, Jacq.); carneus;
cuspidatus;—alatus; alatus, Andrews, t. 8. galeatus,
Andrews, 122; viridis, Hort. Kew. add.—tenellus;—
setisolius.

In the above list, those which are not separated by a line, are nearly allied: such as are not followed by a citation, are in WILLDENOW'S edition of Spec. Plant.



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IXIA CONICA. ORANGE-COLOURED IXIA.

Class and Order.

TRIANDRIA MONOGYNIA.

Generic Character.

Cor. 6-partita patens æqualis. Stigma 3, erecliuscula patula. Sem. fubrotunda plurima.

Specific Character and Synonyms.

IXIA conica, scapo simplici, limbo patentissimo, filamentis coarctato-erectis autheris patentibus triplo brevioribus, fligmatibus non ultra bafin antherarum divifis. Gawler.

IXIA conica. Salifo. prod. Hart. 36. Martin Mill. Dict. a. 47.

IXIA maculata, var. flava apicibus purpureis. Thanh. Diff. 19. Willd. Sp. Pl. 1. 205.

IXIA maculata. L. Mant. 20? Burman, fl. Capenf. Ait. Kew. 1. 60.

IXIA Milleri. Berg. fl. Cap. 8. quoad descriptionem sed fig. 1. non fig. 2. Milieri.

IXIA capitata. Andr. Bot. Repos. 50. Ejusque Recensionis. IXIA maculata.

IXIA foliis gladiolatis glabris, floribus corymbosis terminalibus. Mill. Icon. 156. f. 1.

SISYRINCHIUM africanum, majus flore luteo macula notato. Oldenland. Afr. 32.

Spike broad-thyrfiform; rachis flexuofe, 1-8 flowered; spathe membranaceous; outer valve broad-ovate, inner one narrower, bifid, both shorter than the tube, and this 1-3 times shorter than the limb, which is horizontally patent; fegments oblong-oval, firm, the outer ones fomewhat broadest and more obtuse, generally suffused on the outside towards the points with crimfon, when folded up (which they are upon every flight obnubilation of the fun) they form a narrow-pointed

and somewhat angular cone with a hypocrateriform base, in which state this species is very distinguishable from its congeners. It varies with deep orange and with straw-coloured slowers from one to two inches in diameter, stain more or less variegated by its six-rayed star. Leaves four or sive, grass-like, about half the length of the scape, which is from six inches to two seet high; scentless; expands only when the weather is clear, warm, and still. Dried, it preserves its brilliancy unimpaired, and is a great ornament to the herbarium. Flowers in May.

This appears to be a very common plant at the Cape, as every importation of builds from thence contains a confiderable proportion of it, and some arrivals have confisted of little else. Perhaps it may be the plant first described by Linneus in the Mantissa, by the name of Ixia maculata; but as that is said to differ from Ixia ereca only in having a stain at the basis of the corolla, we reserve this name for the species answering best to this description, especially as we cannot trace our plant in any one of the thirty-eight varieties of maculata figured in Hortus Schoenbrunnensis, among which several distinct species appear to us to have been blended.

Mr. Salisbury gave it the name of conica, from the abovementioned peculiar appearance of the flower when closed. Professor Martin, as we judge by his calling the colour a deep red, did not understand the species this author was describing, being missed probably by the word miniata, as we confess ourselves to have been, when we proposed this as a doubtful

fynonym of Ixia patens.

It was cultivated from Cape feeds, by MILLER, in 1757;

but his figure is full of botanical errors.

Our acquaintance with that portion of the vegetable kingdom included in Jussieu's natural order of Irides (the Enfatæ of LINNEUS) has of late advanced with rapid strides, and new subjects continually offering themselves for proper arrangement, the necessity of a reform in the present constituent genera of this order is felt by every Botanist. We had entertained hopes of being no longer under the necessity of adopting an effential character fo vague and indeterminate as the one annexed; but unfortunately this reform is attended with much difficulty; the regularity or irregularity, the curvature or straightness, the equality or inequality of the corolla in this tribe, although hitherto used as the foundation of genera, being never to be depended upon for folid, effential (and fometimes scarcely for specific) distinctions: so that, notwithstanding the pains he has taken, our friend, Mr. GAWLER, has not been as yet able to reduce this genus to its proper Handard.

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IXIA, GLADIOLUS, ANTHOLYZA, WATSONIA, and BA-BIANA, all require a fimilar treatment; that is, merely to be kept from being frozen, or too much chilled, as they frequently are in a pit, in a roomy light greenhouse, into which plenty of air can be admitted, and to be planted in smallish pots with the black mould taken from the furface of heaths, well rotted and thoroughly mixed with a small quantity of loam. No artificial heat must be used, except in very hard weather. Little water must be given in the Winter for fear of rotting the bulbs, but abundance in the Spring and Summer. Upon the decay of the leaves the bulbs should be taken up, carefully

dried, and replanted in September or October.

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Pub by W. Curtis, S. Geo Crefcent Nov. 1 1861. F. Sanfon saily SEdwards del

MESEMBRYANTHEMUM POMERIDIANUM. GREAT YELLOW-FLOWERED FIG-MARIGOLD.

Class and Order.

ICOSANDRIA PENTAGYNIA.

Generic Character.

Cal. 5-fidus. Petala numerosa linearia. Caps. carnosa, infera, polysperma.

Specific Character and Synonyms.

MESEMBRYANTHEMUM pomeridianum; foliis planiufculis lato-lanceolatis lævibus fubciliatis distinctis, caule pedunculis germinibusque hirtis. Sp. Pl. 698. facquin Icon. rar. v. 2. 489. Ait. Hort. Kew. 2. 194. Martin Miller's Diet. n. 66. Linn. Dec. 1. tab. 13.

MESEMBRYANTHEMUM

glabrum; And. 57. an hujus varietas nana?

This is certainly the MESEMBRYANTHEMUM pomeridianum of LINNEUS, both accurately described and figured by the younger LINNAUS. The MESEMBRYANTHEMUM belianthoides of the Kew Catalogue we should be tempted to put down as a mere variety of this; but observing that both forts were introduced by Mr. Masson from the Cape the same year, we are unwilling to suppose that, in so accurate a work, two species should be made of one when both could be compared together.

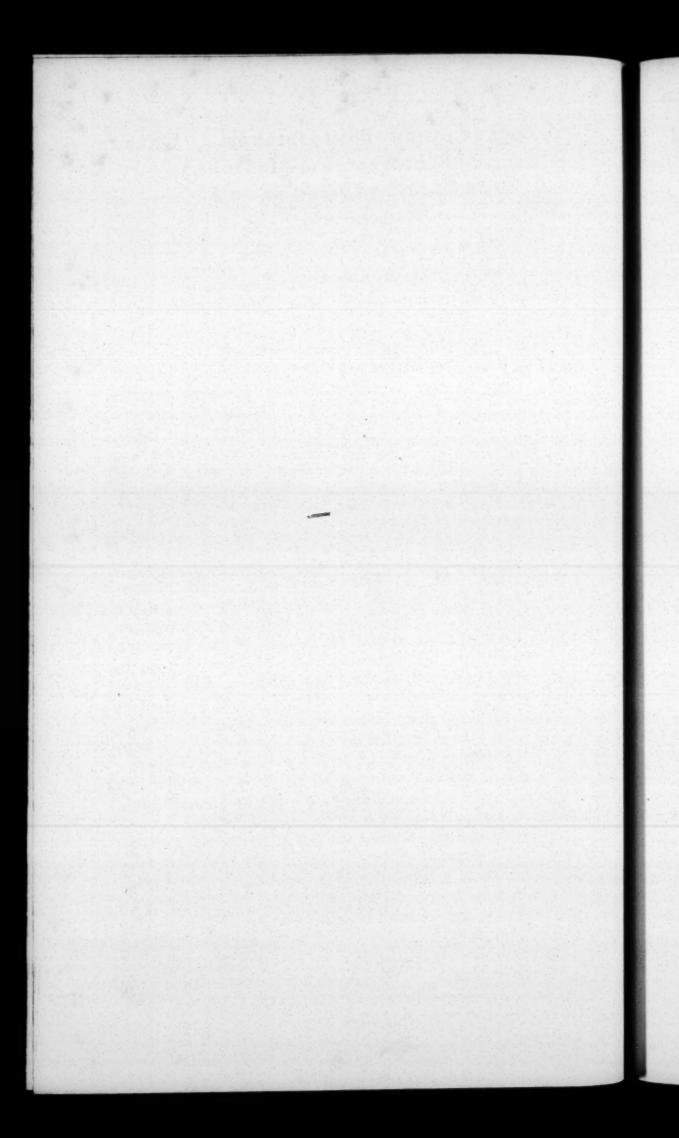
It has usually twelve stigmas and as many cells in the capfule; the pedunctes and base of the calyx are always hairy; the fegments of the calyx irregular, three of them flat and ufually longer than the petals, and two rounded in the middle

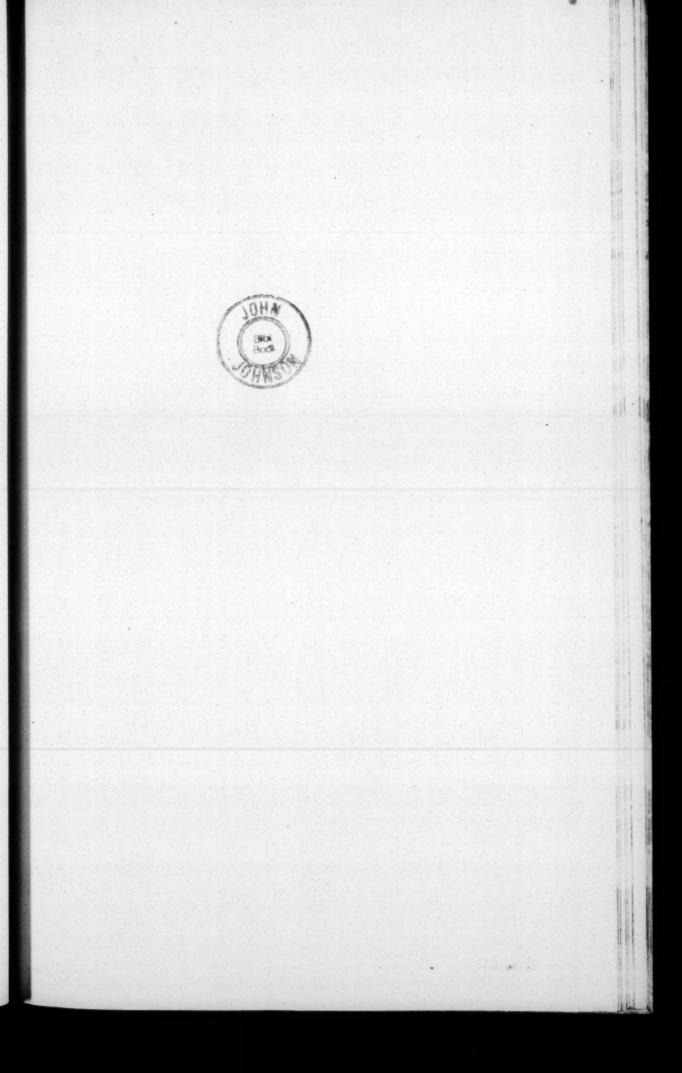
with membranaceous appendages at the base.

It is a tender annual; but if raised in a hot bed in April or May, the young plants may be fet out in the open border by the middle of June, where they will thrive much better than when confined in a pot. They produce a great number of flowers, which when expanded, as they always are in the afternoon if the fun shine, are very shewy; and as they feed freely, they are eafily propagated.

Our figure was taken in the Botanic Garden at Brompton early in July last.—Introduced to the Royal Garden at Kew,

by Mr. Masson, 1774. Ait. Kew.





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IXIA GRANDIFLORA. VELVET-FLOWERED IXIA.



Class and Order.

TRIANDRIA MONOGYNIA.

Generic Character.

Cor. 6-partita patens æqualis. Stigm. 3 erectiuscula patula. Sem. subrotunda plurima.

Specific Character and Synonyms.

IXIA grandistora; foliis subtiliter striatis, spathis aristatolaceris, tubo brevi: laciniis stellato-patentibus oblongocuneatis apice rotundatis, staminibus lateralibus. Gawl.

IXIA grandislora. De la Roche Diss. p. 23. Houtt. Nat. Hist. p. 17. pl. 77. f. 3. Linn. Pfl. Syst. 11. 37. t. 77. f. 3. Salisb. Prod. Hort. 37. 26.

IXIA bulbifera (a) flore purpureo. Thunb. Diff. 16, 17.

IXIA aristata. Hort. Kew. 1. p. 57. Willd. Sp. Pl. 1. 203. And. Bot. Rep. t. 87. cjusque Recens.—(nec vero Thunb.)

IXIA uniflora. Mant. 27. Herb. Linn. Jacq. Coll. 4. p. 181. ic. rar. 2. t. 283.

IXIA holosericea. Facq. Hort. Schoenb. v. 1. cum 3 var.

IXIA foliis gladiatis glabris, caule unissora. Mill. ic. 237. fig 3. cum 2 aliis var.

SISYRINCHIUM æthiopicum majus. Comm. Hort. Am. v. 1. 1. 42. p. 83. Anne species distincta?

Descr. Bulb ovate, about the fize of a hazel nut, covered with a white filky fibrous tunic, base umbilicated. Leaves from five to eight, ensiform, shorter than the scape, distich, outer ones gradually shorter. Scape from six inches to a foot long, thickish, stiff, and nearly of equal thickness. Rachis very slexuose. Spathe membranous, light brown with dark edges, more or less torn into irregular awn-like jags, according to the time it has been in flower (for, if not at first, it is sure to be so sooner or later). Flowers from one to sive, never more, large, shewy. Tube short, nearly the length of

the spathe. Segments several times longer than the tube, sometimes ending with a small point more or less obsolete. Branches, when any, one or two slowered. Parts of Frustification lateral (i. e. inclined to one side without being ascendent). Stamens diverging, whitish. Stigmas large, exceeding the anthers, recurved, complicate, ciliate. Stem-Bulbs one or two, slender, oblong, from the axils of the inner root-leaves.

It varies with violet, white, blueish, purple, and striped flowers, also with flowers white on the inside and purple without, with a star at the base. This last is the Sisyrinchium of Commelin, above quoted, and being much taller, with longer slenderer leaves, may be a distinct species; but this with grandistora, bulbifera, and what is, perhaps, a variety of this, lacera of the Linnean Herbarium, are so nearly allied, that it is difficult to define their differences. All of them are scentless.

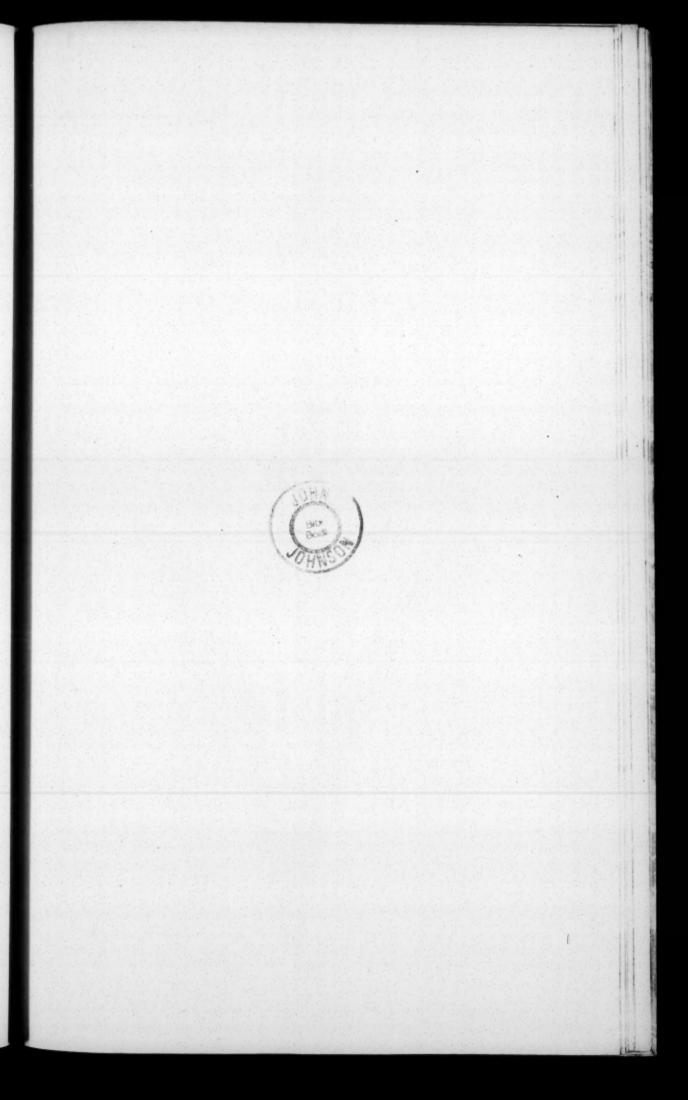
This being the Ixia ariflata of Hort. Kew. it was defirable to have retained a name established upon such authority; but as it was so called, under the supposition of being the ariflata of Thunberg, which it is not, we should by so doing, only perpetuate a mistake; and when we come to give a figure of the true aristata of Thunberg, as we hope to do, we should be obliged to find a new name for that, and thus increase the confusion we wish to dispel; we feel ourselves, therefore, at liberty to adopt one of the names by which it has been already described: the one we have chosen has the right of priority, and is at the same time sufficiently characteristic. De La Roche published his description of it at Leyden in 1766, and it has been since sigured under the name of Ixia grandistora, by Houttuyn, in two works.

The IXIA aristata of THUNBERG has a reticulated bulb, linear five-nerved leaves, with a prominent mid-rib and thickened margin; from five to nine flowers of a pale flesh colour, one-ranked, on a rachis scarcely flexuose; spathe submembranous, awn-toothed (not torn). Vide Thunb. Diff.

Our plant is the purple variety of Thunberg's Ixia bulbifera (a) but his yellow variety (γ) which is now deemed a distinct species, is more constantly and conspicuously bulbiferous, having frequently several bulbs at the joint of the stem as well as in the axils of the lower leaves; for this, therefore, the trivial name of bulbifera is properly reserved.

For the proper culture, see p. 539. It is propagated easily by seeds and bulbs. Flowers in May. Was introduced into the Kew Garden in 1758.

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SEdwards del. Pub. by W.Curtis, St. George efect Tre. 1.1801. F. Sanjen so

IXIA SCILLARIS, var. LATIFOLIA (a). SQUILL-FLOWERED IXIA.—Broad-Leaved Variety.

Class and Order.

TRIANDRIA MONOGYNIA.

Generic Character.

Cor. 6-partita patens æqualis. Stigma 3 erectiuscula patula. Sem. subrotunda plurima.

Specific Character and Synonyms.

- IXIA feillaris; corollæ laciniis obtufiffimis, antheris breviffimis fulcato-didymis capitato-conniventibus, stigmatibus infundibuliformibus hiantibus infra antheras recurvatis.

 Gazuler.
- IXIA scillaris. Linn. Sp. Pl. 52, ejusque Herbarii. Hort. Kew. 1. 59. Burm. Prod. 1. Houtt. Nat. Hist. v. 12. t. 77. Houtt. Linn. Pfl. Syst. v. 11. p. 33. t. 77. f. 2. Nec vero Thunbergii.

IXIA pentandra. Linn. Fil. Suppl. 92. Thunb. Diff. 18. 22.

Prod. 10. Syft. Veg. Murr. 85. Willd. Sp. Pl. v. 1.
p. 207.

IXIA retufa. Salifb. Prod. Hort. 35. 11. Mart. Mill. Diet. n. 44.

(a) latifolia. Spica elongata, corollæ tubo spatham brevem subæquante: laciniis reslexis, soliis latere excisis (sapissime subundulatis) scapo 3-4-plo brevioribus. G.

IXIA polystachiæ var. Jacq. Coll. Suppl. 159. tab. 2. f. 1. IXIA reflexa. And. Bot. Rep. t. 14, ejusque Recens. IXIA rotata—Calyx herbacea 5-sida, slores pedicellati, folia integerrima sunt pictoris errores.

(β) angustifolia. Floribus minoribus, tubo capillari spatha duplo longiore laciniis patentibus (modo retusis) æquali, foliis subexcisis longioribus. G.

IXIA polystachia, Jacq. Coll. 3. 269. Ic. Rar. 2. 1. 275. Gmel. Syst. Nat. p. 110. And. Bot. Rep. 1. 128. ejusque Recens.

Descr. Bulb scarcely bigger than a pea, round, covered with a dark brown smooth tunic. Stem from a foot to a foot and a half high, simple or with one or two branches. The spike of this variety has from ten to twenty slowers, somewhat remote, especially towards its base. Leaves 3-4. Calyx

Calyx short, outer valve three, inner two-toothed. Corollas sometimes with so short a tube that they appear to be rotate: Segments somewhat unguiculate, obovate, concave, and ultimately reflexed to the very stem, though previously only partially so, perhaps one, then two, which at that time gives it the appearance of having irregular corollas. Stamens short, upright. Pistil shorter. Anthers very small, oblong, or ovate, approaching each other so as to form a kind of head. Stigmas ciliate.—It is very apt to have the tops of its leaves withered before it slowers. Varies with purple, rose, pink, and whitish corollas. All scentless, though Jacquin describes the narrow-leaved one as sweet; this blows much later and is probably a distinct species.

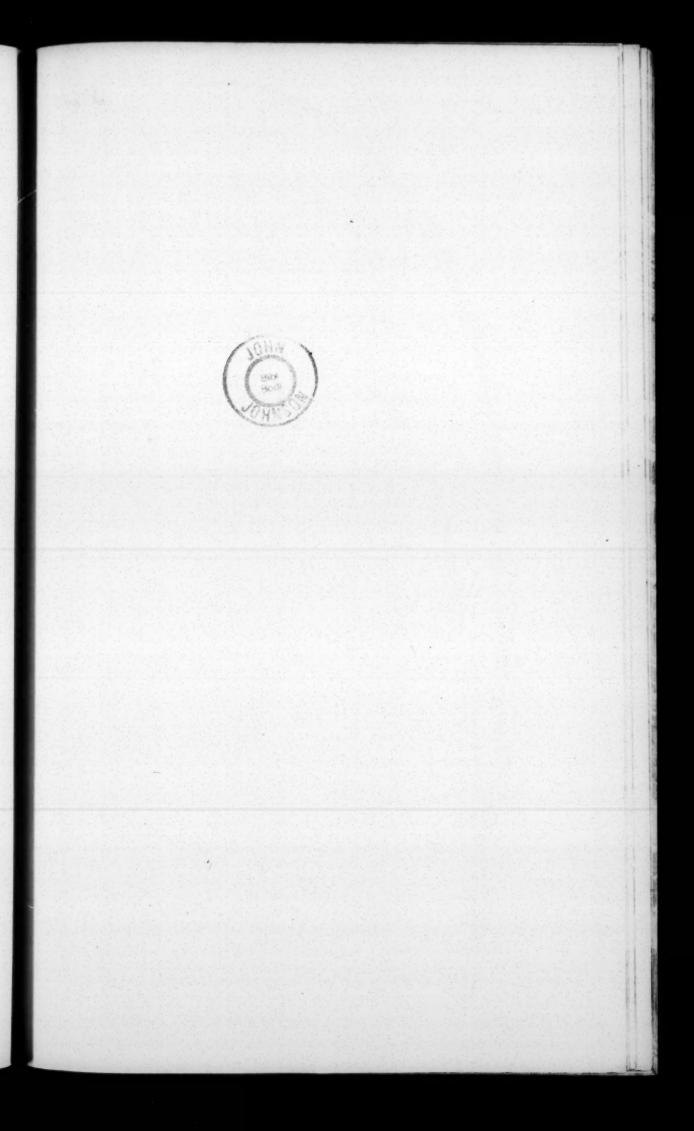
This is certainly LINNEUS'S plant, and received its trivial name from a supposed resemblance to SCILLA amena, a proof that he described from a dried subject, in which state it certainly affords different ideas of resemblance, than when seen in a living one, especially in colour, which then becomes nearly violet; but is distinct from the I. seillaris of Thunberg, that being nearly allied to I. secunda. What is usually called seillaris by the Nurserymen is Ixia excisa, which resembles our

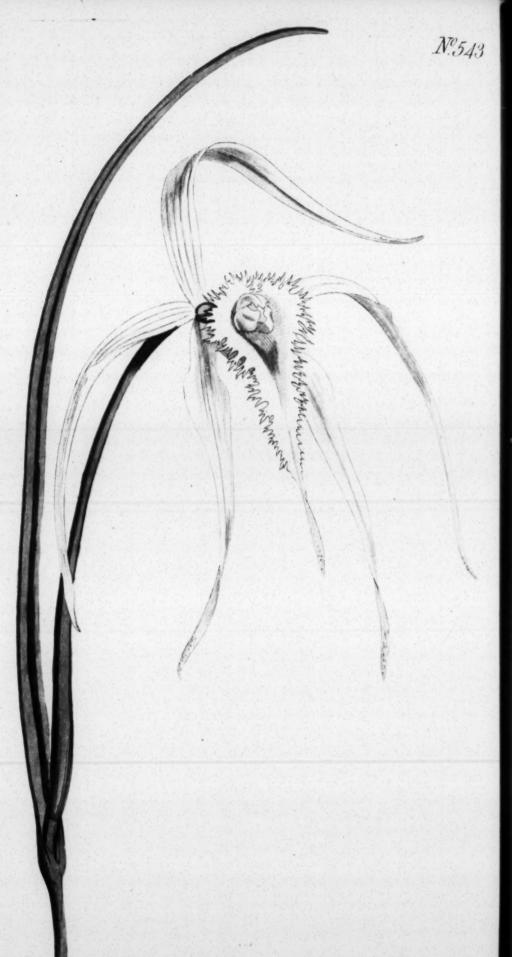
plant in the leaf, but is a completely different species.

This article, for which, as well as the preceding, we are entirely indebted to Mr. GAWLER, will, we hope, be the means of putting an end to the errors and confusion this species has caused among Botanists. The Synonyms are so arranged as to shew its history and clear up the blunders. THUNBERG sufpected LINN Eus's scillaris was his secunda, a species, perhaps, the most distant from it of the whole genus. He observes of our plant, that it now and then, though rarely, has four stamens and four stigmas, and sometimes five, to which he might have also added fix; but this is a luxuriancy well known to all cultivators of this genus not to be at all uncommon in most of the species; to which redundancy of the parts of fructification, a proportionate one of the fegments of the corolla is often added; but furely this cannot justify his adopting the trivial name of pentandra, especially as he allows its having five stamens to happen very rarely. Ixia crocata fometimes occurs with twelve degments, fix stamens, fix stigmas, and Ixia falcata with nine fegments, fix stamens, styles, and stigmas.

It is eafily propagated by feeds and offsets; flowers as early as January. Was introduced into the Kew Garden by

Mr. Masson in 1787.





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EPIDENDRUM CUCULLATUM. HOODED EPIDENDRUM.



Class and Order.

GYNANDRIA DIANDRIA.

Generic Character.

Nedarium turbinatum, obliquum reflexum.

Specific Character and Synonyms.

EPIDENDRUM cucullatum; foliis subulatis, scapo unissoro, nectarii labio ovato ciliato acuminato, petalis elongatis. Spec. Pl. 1350.

HELLEBORINE floribus albis cucullatis. Plum. Spec. 9.
Icon. 179. f. 1.

This very curious species of EPIDENDRUM, which we believe flowered for the first time in this country* in the bark flove of EDWARD WOODFORD, Esq. Vauxhall, in September last, rifes with a fingle stem, clothed with two or three alternate ash-coloured scale-like spathes, so closely adpressed as to be scarcely discernible. From the top of the stem issues one leaf (perhaps, as in the figure of PLUMIER, fometimes more) fleshy, linear, acute, convex at the back, and slightly grooved in front. From the bosom of this leaf rises a round scape, at first swelling, then attenuated upwards, bearing a solitary flower, perfectly white when newly opened, but becoming tinged with a yellowish green, confisting of three external and two internal petals, of fimilar length and shape, linear, somewhat undulated, the two inner ones exactly opposite, and a nectary furrounding the parts of fructification shaped like a friar's cowl, far-acuminate, fringed, continuing of a fnow white after the petals have changed their tint. Nearly scentless.

It was in the royal collection at Kew in 1794. Mart. Mill. Dia.

In the same superb collection, we had the pleasure of seeing in flower, at the same time, the Epidendrum fragrans of Swarz, so called from the very fine odour it diffuses far around, a plant, formerly figured in the Botanical Magazine, and there called by mistake Epidendrum cochleatum. Who can avoid occasional error, especially where the species are so numerous? Professor Martyn, in his edition of Miller's Dictionary, enumerates one hundred and twenty-sour kinds, of which but thirty were known to Linneus, and only sour appear in the Kew Catalogue.

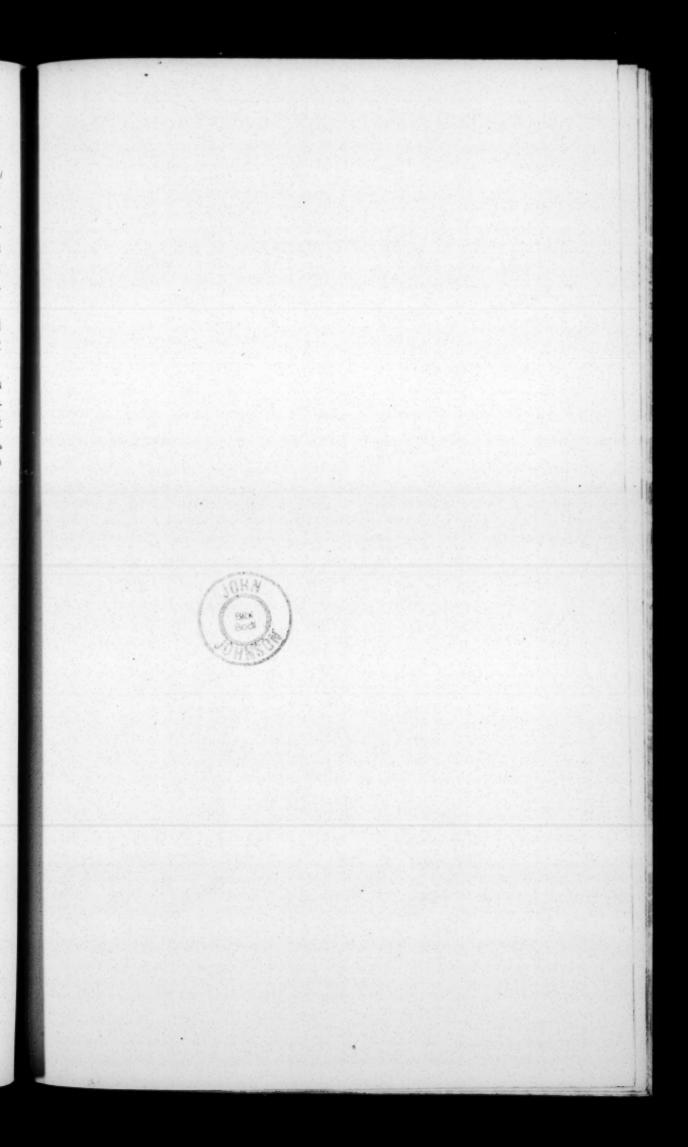
Being a native of the West-Indies, and naturally a parasitical plant, its culture is difficult, and it is of necessity a constant

inhabitant of the bark stove in our climate.

Mr. Woodford's head gardener, Mr. Watson, who is a very successful cultivator and pays great attention to the natural propensities of plants, recommends in the management of Epidendrum to protect the roots by knobs of old tan, and observes that, in general, they love shade and a hot damp air, but do not bear much water to the roots.

iar's cowl, far-accominate, harged, continued in the petals have changed, their trans.

Note: The court of the second sollies are the second sollies and the second sollies are second sollies and the second sollies are second sollies a





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ARCTOTIS ANTHEMOIDES. CHAMOMILE ARCTOTIS.



Class and Order.

SYNGENESIA POLYGAMIA NECESSARIA.

Generic Character.

Recept. villosum seu paleaceum. Pappus corona 5-phylla. Cal. imbricatus: squamis apice scariosis.

Specific Character and Synonyms.

ARCTOTIS anthemoides; radio sterili, paleis slosculos subæquantibus, seminibus basi penicillatis, soliis duplicato-pinnatisidis linearibus.

ARCTOTIS anthemoides; paleis flosculo brevioribus, foliis fupra decompositis linearibus. Sp. Pl. 307.

Martyn's Miller's Diet. 13.

CHAMEMELUM. Burman. Afr. 174. t. 63. f. 2. URSINIÆ Spec. Gært. fruet. 2. 462.

Descr. Root annual, fibrous. Stem much branched at the base; leaves smooth, alternate, doubly pinnatisid: leaslets linear, somewhat reslexed. Peduncles terminal, long, obsoletely channelled. Calyx subovate, imbricate; scales ovate, marginated, the internal ones largest. Receptacle chassy and hairy, the hairs coming off attached to the seed. Chass involving the floret and nearly equal to it, persistent. Radius about twelve-rayed, neuter, sterile, yellow within, and purple without. Disk yellow, slorets crowded, a little exceeding the chass. Seeds striated, incurved, with a membranous crown of sive leaslets, which are white with a brown streak in the middle, and have a tust of cottony hairs at the lower extremity.

The

The genus Arctoris, as at present constituted, contains species which do not well accord with one another, nor even come under the same order in the Linnean system, the present plant properly belonging to the order of POLYGAMIA FRUS-TRANEA. ARCTOTIS anthémoides, paradoxa, and dentata, are, however, certainly congeners, and GERTNER has made an attempt to form them into a distinct genus, under the name of URSINIA, in which we might have been led to have followed him, but unluckily our plant wants his effential character of a double pappus on the crown of the feed. It frequently, though not generally, happens that the floret remains attached to the feed after this is ripe; is it possible that, in the examination of a dried specimen, such a circumstance could have deceived this accurate Botanist? However this may be, our plant has certainly no fuch double pappus, one within the other, as he has described and figured, although it has, which is very unufual, a fort of pappus at both ends, a membranous crown at one end, and a pencil of hairs at the other. By this last, the seed attaches itself to whatever it happens to touch, and by this means may be conveyed to a greater distance than by the help of the wind.

Though possessing no particular beauty, it is, in several respects, curious to the eye of a common observer. All the inside of the slower is of a lively yellow colour, the outside purple. The buds nod, but the slowers when expanded stand erect; as the slower decays, it again nods till the seeds are ripe, when it rises upright, and the crown of the seed expanding at the same time, it very much resembles some slower of another samily, having a corolla of sive white segments and a brown star in the middle, not very unlike a statice. The

whole plant fmells like Chamomile.

It is an annual, a native of the Cape of Good Hope, and thrives very well in the open border, and if brought forward by being fown on a hot-bed in the Spring, will produce plenty of feeds. If kept within doors, the flowers diminish in fize and lose their purple colour. It has been cultivated at the Botanic Garden at Brompton fince the year 1795, at which time it was first raised there from feeds obtained from the

Cape of Good Hope.



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IXIA BULBIFERA. SULPHUR-COLOURED IXIA.



Class and Order.

TRIANDRIA MONOGYNIA.

Generic Character.

Cor. 6-partita patens æqualis. Stigm. 3 erectiuscula patula. Sem. subrotunda plurima.

Specific Character and Synonyms.

IXIA bulbifera; foliis multistriatulis, spatha lacera, corolla infundibulisormi superne patente: tubo brevi: laciniis ovato-oblongis, staminibus lateralibus divergentibus. Gazvler.

IXIA bulbifera. Linn. Sp. Pl. 51. Syst Veg. 85. Reichard.
1. 99. Amæn. Acad. 4. 300. Hort. Kew. 1. 57. Willd.
Sp. Pl. 1. 204. Bot. Repos. 48. Ejusq. recens. 8. Burman. prod. sl. cap. 1.

IXIA bulbifera, var. y. flava. Thunb. Diff. 16.

IXIA bulbifera. Mill. Diet. ibi enim flores sistit sulphureos; ejus specimen vero apud HERB. BANKS. æque ac icon pieta floribus gaudent albo-purpureis!

IXIA monanthos. De la Roche, Diff. 21?

This is also termed by the Dutch Vluweel Bloemje, or Velvet-flower, as well as IXIA grandiflora of the last number, to which it is very closely allied, but generally taller, leaves paler or more tinged with yellow; stem bearing from one to four bulbs at each joint, which fall off when mature; corolla likened to Hemerocallis in the Amænitat. Academicæ, somewhat smaller and narrower than in grandiflora; segments with the sides curved

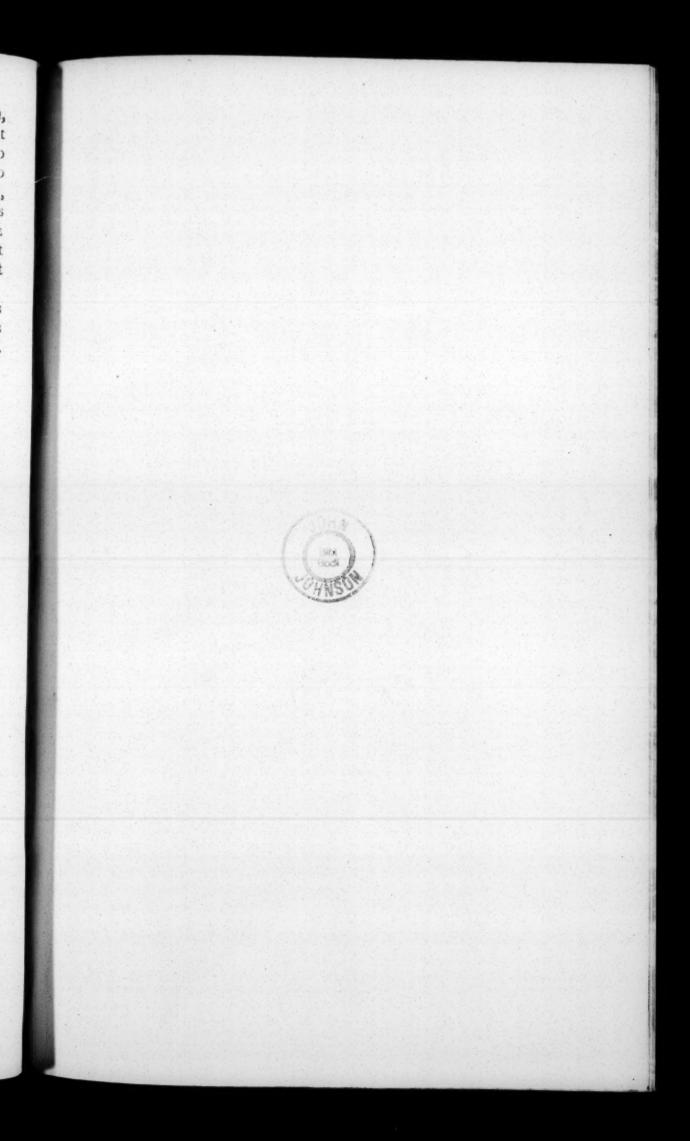
curved not straight, approaching an oval not a cuneate form, points though obtuse not so broadly rounded; colour light yellow. Strong plants from old bulbs generally have two branches; slowers, three to five, scentless, or, according to Mr. Curtis, slightly fragrant; leaves, as in its relatives, more numerous than is general in Ixia, six to ten, outer ones gradually shorter, outermost scarcely half an inch long. De La Roche's variety is blotted and streaked with brown; but if Ixia lacera, which we have not yet met with, be a distinct species, this would rather be a variety of that.

Propagates fast by feeds, stem-bulbs, and root-bulbs, and is become one of the commonest species in our gardens, yet has never before been figured, except in the Botanist's Repository. Preserves its colour, when dried, unimpaired. Cultivated by

MILLER in 1758.

It has been supposed that many remarkable varieties in this genus have been produced by the industry of Dutch gardeners, but this is very doubtful, for certain it is that scarcely a variety, or what is supposed to be such, has been imported from Holland, that has not been produced also from bulbs that were undoubtedly gathered wild or discovered in specimens collected at the Cape. Whenever therefore a plant affords marks of distinction from its congeners, exceeding those alloted to variety by LINNEUS, and is not known to have been raised from the seeds of the identical species of which it is pretended to be a variety, we, without hesitation, record it a distinct species: as studiously avoiding, on the other hand, to enumerate as fuch, those that merely differ within the rules prescribed by our great master. When, as in this instance, we are but flightly acquainted with the local economy and precise habitat, this rule requires to be strictly attended to.

N. B. In the enumeration of the species of WATSONIA (see 537) we omitted IXIA spicata (fistulosa, Bot. Mag.) and IXIA plantaginea, which we now propose for insertion.—WATSONIA plantaginea will be shortly given.





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Monarda Didyma. Scarlet Monarda, or Oswego-Tea.

Class and Order.

DIANDRIA MONOGYNIA.

Generic Character.

Cor. inæqualis: labio superiore lineari filamenta insolvente. Semina 4.

Specific Character and Synonyms.

MONARDA didyma, floribus capitatis fubdidynamis, caule acutangulo. Linn. Sp. Pl. ed. 3. p. 32. Ait. Kew. v. 1. p. 36. Mill. ic. 183. f. 1.

MONARDA floribus capitatis verticillatifque, caule acute angulato, foliis lanceolato-ferratis glabris. Buttn. cun. 226. Trew. Plant. Select. 3. t. 64. Zorn. icon. 249.

Betwixt the variety of Monarda fiflulosa, figured pl. 145, of this work, and the present species, there is a great similarity, especially as that plant is coloured, the blossoms not inclining so much as they ought to the crimson hue; for, in regard to colour, the two plants differ very materially, the slowers of the didyma being of a rich scarlet, and those of the fistulosa var. of a fine crimson; but the great specific difference between the two consists in the angles of the stalk, which are sharp in the one and obtuse in the other; the variety of the fishulosa grows to a greater height also; there are many other differences which it is needless to particularise, suffice it to say, that they are both very desirable plants, of the hardy herbaceous kind, and worthy a place in all collections.

The didyma feldom rifes to above the height of two feet, it throws out numerous stalks, whence it becomes bushy; its foliage when bruised gives out a most delightful fragrance, which alone would entitle the plant to a place in every garden.

It is a native of North-America, from whence it was introduced by Peter Collinson, Eq. in 1755, flowers from June to August; prefers a moist soil, where, like some of the mints, it increases greatly by throwing out numerous shoots from its roots, by dividing and transplanting of which it is readily propagated, as well as by seeds, which it produces, though not abundantly.

The name of MONARDA was given to this genus in honour of Nicholas Monards, a Spanish Physician, of the fixteenth century, and its trivial name from this species having subdidynamous flowers, i. e. with four stamens, but two of

them without anthers.

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PELARGONIUM QUINATUM. FIVE-FINGERED PELARGONIUM, OF CRANE'S-BILL.



Class and Order.

MONADELPHIA HEPTANDRIA.

Generic Character.

Cal. 5-partitus: lacinio suprema definente in tubulum capillarem nectariferum secus pedunculum decurrentem. Cor. 5-petala irregularis. Fil. 10 inæqualia: quorum 3 (raro 5) castrata. Fruetus 5-coccus rostratus: rostra spiralia introrsum barbata.

Specific Character and Synonyms.

PELARGONIUM quinatum; caule fruticoso angulato, foliis alternis quinque-partitis: foliolis cuneatis apice tridentatis, pedunculis unissoris erectis terminalibus, calyce maximo stellatopatente.

GERANIUM præmorfum. Bot. Repof. 150.

This very rare and distinct species is but of low stature, at least we have not yet seen it reach a foot in height. The stakk is woody at the lower part and angular; branches sew, slessly, slexuose, with leaves growing alternate on footstaks the length of the least, with two very small green subulate stipulæ; leaves soft, kidney-shaped, divided almost to the footstak into sive cuneate three-toothed segments, the two outer ones, as is usual, broader than the rest, consisting as it were of two united. From the very extremity of the branch grows one erect peduncle, jointed at the base, and having just below the joint generally three concave ovate bracteæ. The similarity of the peduncle and bracteæ to those of the umbellate species, leads to a suspicion that the slower may not always be solitary; how-

ever, we have never as yet seen it bear more than one to each branch. The segments of the calyx are very long, spreading, linear-lanceolate. Corolla large, shewy, the two superior petals erect, obovate, cream-coloured, beautifully streaked from the centre with red veins, and more than double the size of the three lower paler veinless petals. Fertile stamens feven, ascendent, with purple anthers. Stigmas sive, rotate, incurved.

When a plant has obtained an established name, we hold it better to retain this than to change it even for a better; but this species never having been, to our knowledge, described by any author of authority, we feel ourselves at liberty to adopt the name of quinatum, which was with great propriety proposed by Mr. GAWLER, from its leaves being divided into five segments or leastets, much in the same manner as those of ternatum are divided into three; the nurseryman's name præmorsum, which gives a salse idea, appearing to us totally inadmissible.

It is easily propagated by cuttings, but the tender branches

feem very apt to perish.

Was first raised from seeds procured from the Cape by Mr. QUARRELL, at the nursery of Mr. Colville, King's-Road, Chelsea, where it has been plentifully increased.

Our figure was taken from a specimen which slowered at EDWARD WOODFORD'S, Esq. the latter-end of May 1801.



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IXIA BICOLOR. RINGENT IXIA.

Class and Order.

TRIANDRIA MONOGYNIA.

Generic Character.

Cor. 6-partita patens æqualis. Stigma 3 erectiuscula patula. Sem. subrotunda plurima.

Specific Character and Synonyms.

IXIA bicolor; spatha lacera, corolla-bilabiata angusta: limbo tubum subæquante: laciniis lateralibus inferioribus minoribus convolutis ab intermedia minus profunde partitis. Gawler.

GLADIOLUS bicolor. Thunb. Diff. 16. t. 2. f. 1. prod. 8. Jacq. Coll. Sup. 25. ic. rar. 2. t. 240. Hort. Kew. add. 481. Willd. Sp. Pl. 1. 216.

GLADIOLUS latifolius floribus clausis obsoletis ad caulem villosis. Breyn. prod. fl. rar. p. 2. p. 21. t. 8. f. 2.

GLADIOLUS villosus. Burm. prod. fl. cap. 2.

Many of our readers will doubtless be surprised to see this plant ranked under Ixia, where indeed, as the essential character has hitherto stood, it can claim no admission; but, while grandissora and its relatives are suffered to remain, this cannot be excluded without giving a shock to natural assimity, as violent to that as useless to artificial system, for so completely do this and Ixia grandissora of the last number agree in habit, in capsule, in seed, and in spathe, that before the corolla is expanded, or after it is wasted away, they cannot be distinguished from each other. From the irregularity of its corolla alone it has been universally considered to be a Gladistinguished from which genus it is however entirely excluded by the corrected essential character, as given by Mr. Gawler (vid. 538). As this agrees with Ixia grandissora, bulbisera, &c. so does Gladiolus securigera of the Bot. Mag. with

IXIA crocata and its relatives, and differs nearly in the same manner, and both must belong to genera, of the essential character of which the regularity or irregularity of the corolla can form no part. Mr. Curtis appears to have been sensible of the natural affinity of these plants, and under this impression had marked the drawing of IXIA bulbifera, given this month, GLADIOLUS sulphureus, and noted it as one of those species which it is difficult to determine whether it belongs to that genus or to IXIA. When such men as he are at a loss to arrange the species under the genera as now constituted, it shows the necessity of a reform*.

For an opportunity of presenting our readers with a figure of this very rare species, we are indebted to EDWARD WOODFORD, Esq. of Vauxhall, from whose rich mine our work is

adorned with many a gem.

It is omitted by GMELIN, in Syft. Nat. and by MARTYN, in Mill. Dist. Was introduced to the Kew Garden by Mr. Masson, in 1786. Flowers in March. Scentless. May it be a hybrid plant?

^{*} Convinced of these imperfections in the present arrangement, Mr. Gawler has been led to propose the forming a new genus, under the name of Sparaxis (σπαραξις laceratio) but sensible that "in so in natural an order of plants, nothing is more difficult than to find generic characters that shall be stable and not set aside by every new species that comes in our way t:" he does not venture further at present than to propose, leaving the rejection or adoption of it to the stuture determination of the Botanical world.

Ess. CHAR. Spatha scarioso-membranacea ante deflorescentiam lacera. Cor. 6-partita basi infundibulisormi-tubulosa. Stigm. 3 recurvo-patentia. Caps. subrotunda. Sem. plurima rotunda. Gawler.

OBS. Radix tuber fibroso-tunicatum. Caulis sapissime ex axillis foliorum bulbisera. Folia 6—10, ensisormia subtiliter multistriata glabra. Rachis flexuosa. Flores pauci remoti. Genitalia erecta lateralia vel etiam adscendentia. Tubus spatham subaquans: limbus regularis vel bilabiato-irregularis patentissimus vel angulatus. IXIA pendula; elata, spica elongata, multissora, disticha, ramis gaudet capillaribus rigidis plurimis pendulis. G.

Under this genus will rank,
IXIA fragrans, Willd. IXIA bulbifera, Willd. & Bot. Mag. [IXIA grandiflora, Bot. Mag. IXIA lacera, Herb. Linn. SISYRINCHIUM majus latifolium, Comm. Hort. species si distinctæ]. IXIA tricolor, Bot. Mag. IXIA bicolor, Bot. Mag. IXIA pendula, Willd.?

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In which the Latin Names of the Plants contained in the Fifteenth Volume are alphabetically arranged.

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513 Aloe variegata.

525 Antirrhinum triornithophorum.

544 Arctotis anthemoides.

534 Aristolochia Sipho.

530 Atragene alpina, var, austriaca.

512 Campanula pumila.

511 Chironia linoides.

508 Chryfanthemum tricolor.

510 Convallaria bifolia,

526 Cornus florida.

505 Dianella cærulea.

543 Epidendrum cucullatum.

532 Ferraria Tigridia.

538 Gladiolus undulatus,

531 Iris tuberofa.

548 Ixia bicolor.

545 Ixia bulbifera,

539 Ixia conica.

523 Ixia fistulosa.

541 Ixia grandiflora,

522 Ixia patens.

542 Ixia scillaris, var. latifolia,

517 Lavatera thuringiaca.

519 Lilium philadelphicum.

515 Lithospermum orientale.

514 Lobelia bicolor.

529 Melastoma malabathrica.

540 Mesembryanthemum pomeridia-

num.

546 Monarda didyma.

520 Moræa spiralis.

521 Orobus vernus.

547 Pelargonium quinatum.

524 Pelargonium pulchellum, 518 Pelargonium tomentofum.

528 Phlox ovata.

507 Sempervivum globiferum.

509 Sophora australis.

516 Sparmannia africana.

506 Stapelia lentiginofa.

536 Stapelia Afterias.

535 Viola palmata.

533 Watfonia aletroides.

537 Watsonia roseo-alba.

527 Zinnia elegans.

N E D X.

In which the English Names of the Plants contained in the Fifteenth Volume are alphabetically arranged.

513 Aloe, partridge-breaft.

544 Arctotis, chamomile.

534 Birthwort, broad-leav'd.

512 Campanula, dwarf.

511 Chironia, flax-leav'd.

508 Chryfanthemum, three-coloured.

526 Cornel, great-flowered.

547 Crane's-Bill, five-fingered.

524 Crane's-Bill, nonefuch.

518 Crane's-Bill, penny-royal.

505 Dianella, blue.

543 Epidendrum, hooded, 532 Ferraria, mexican.

540 Fig-marigold, great yellow. flowered.

538 Gladiolus, waved-flowered,

515 Gromwell, yellow.

507 House-leek, globular, 531 Iris, fnake's-head.

522 Ixia, crimfon.

523 Ixia, hollow-leav'd.

539 Ixia, orange-coloured.

548 Ixia, ringent.

542 Ixia, fquill-flowered

545 Ixia, fulphur-coloured,

541 Ixia, velvet-flowered.

517 Lavatera, great-flowered,

519 Lily, philadelphian,

514 Lobelia, spotted.

529 Melastoma, cinnamon-leav'd.

546 Monarda, scarlet-flowered.

520 Moræa, spiral-flowered.

521 Orobus, early-flowering.

528 Phlox, ovate-leav'd.

516 Sparmannia, african.

525 Snap-dragon, three-bird-bearing.

510 Solomon's-feal, leaft.

509 Sophora, blue.

506 Stapelia, freckled.

536 Stapelia, star-fish.

535 Violet, palmated. 530 Virgin's-bower, austrian

533 Watfonia, aletris-like 537 Watfonia, long-tubed.

527 Zinnia, violet-coloured.

